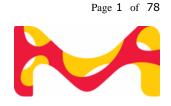


## **SECTION 2: Hazards identification**

2.1	<b>Classification of the substance or</b> Acute toxicity, (Category 3)	<b>mixture</b> H301: Toxic if swallowed.
	Acute toxicity, (Category 3)	H331: Toxic if inhaled.
	Skin corrosion, (Category 1)	H314: Causes severe skin burns and eye damage.
	Serious eye damage, (Category 1)	H318: Causes serious eye damage.
	Skin sensitization, (Category 1)	H317: May cause an allergic skin reaction.
	Germ cell mutagenicity, (Category 2)	H341: Suspected of causing genetic defects.
	Carcinogenicity, (Category 1B)	H350: May cause cancer.

Sigma- MSMLS05



Reproductive toxicity, (Category 1A)

Specific target organ toxicity single exposure, (Category 3), Respiratory system

Specific target organ toxicity repeated exposure, (Category 1), Blood

Short-term (acute) aquatic hazard, (Category 1)

H335: May cause respiratory irritation.

H360D: May damage the unborn child.

H372: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, (Category 3)

H412: Harmful to aquatic life with long lasting effects.

## 2.2 Label elements

# Labelling according Regulation (EC) No 1272/2008 Pictogram

Signal Word Danger Hazard Statements Toxic if swallowed or if inhaled. H301 + H331H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects. H350 May cause cancer. May damage the unborn child. H360D H372 Causes damage to organs (Blood) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects. H410 **Precautionary Statements** Do not breathe dust. P260 P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard information (EU) EUH029 Contact with water liberates toxic gas.

Restricted to professional users.

## Reduced Labeling (<= 125 ml)

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Pictogram	
Signal Word	Danger
Hazard Statements H317 H341 H350 H372 H314 H360D H301 + H331	May cause an allergic skin reaction. Suspected of causing genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure. Causes severe skin burns and eye damage. May damage the unborn child. Toxic if swallowed or if inhaled.
Precautionary Statements	
P260 P280	Do not breathe dust. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Cumplemental Hanavel inform	

Supplemental Hazard information (EU)EUH029Contact with water liberates toxic gas.

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Caution: Physiologically highly active, therapeutically usable substance. The substance must be handled with the care required for hazardous materials.

### **SECTION 3: Composition/information on ingredients**

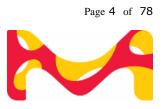
#### 3.2 Mixtures

No components need to be disclosed according to the applicable regulations.





-Diiodo-L-tyros CAS-No.	18835-59-1	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	206-092-0		-
EC-NO.	206-092-0	STOT SE 3; H315, H319,	%
	*	H335	
assium sorbate			
CAS-No.	24634-61-5	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	246-376-1		%
Index-No.	019-003-00-3		70
index No.	*		
lydroxysalicylic	acid		
CAS-No.	303-38-8	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	206-139-5	STOT SE 3; H315, H319,	%
		H335	
	*		
alacetic acid			1
CAS-No.	328-42-7	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	206-329-8		%
Registration			
number	01-2120761037-57-		
	XXXX		
-dihydroxycinna			
CAS-No.	331-39-5	Carc. 2; H351	>= 1 - < 10
EC-No.	206-361-2		%
	*		
lolo-3-pyruvic a	cid monohydrate		
CAS-No.	392-12-1	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	206-874-1	STOT SE 3; H315, H319,	%
LC-NO.	200-074-1	H335	70
	*	11555	
thyl vanillate	2042 74 6	Chine Invite 2: Even Invite 2:	
CAS-No.	3943-74-6	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	223-525-9	STOT SE 3; H315, H319,	%
	*	H335	
	*		
drocortisone 21		Dopr 1B, STOT DE 2.	>= 1 - < 10
CAS-No.	50-03-3	Repr. 1B; STOT RE 2;	
EC-No.	200-004-4	H360Df, H373	%
	*		
etoin			>= 1 - < 3
etoin CAS-No.	513-86-0	Flam. Lig. 3; Eye Dam. 1:	- I - J
CAS-No.		Flam. Liq. 3; Eye Dam. 1; H226, H318	
	513-86-0 208-174-1	Ham. Liq. 3; Eye Dam. 1; H226, H318	
CAS-No.			
CAS-No. EC-No. <b>1ethylmalonic a</b>	208-174-1 * cid	H226, H318	
CAS-No. EC-No.	208-174-1 *		>= 1 - < 10



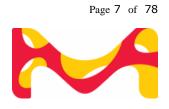
	*	H335	
-(2-Aminoethyl)p		1	1
CAS-No.	51-67-2	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	200-115-8	STOT SE 3; H315, H319,	%
	*	H335	
odium benzoate			
CAS-No.	532-32-1	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	208-534-8	, , ,	%
Registration			
number	01-2119460683-35-		
number	XXXX		
icotin			
CAS-No.	54-11-5	Acute Tox. 1; Acute Tox.	>= 1 - < 2.5
EC-No.	200-193-3	2; Skin Irrit. 2; Eye Dam.	%
Index-No.	614-001-00-4	1; Aquatic Chronic 2;	
THUCK NO.	*	H300, H330, H310, H315,	
		H318, H411	
-Valerolactone		1	1
CAS-No.	542-28-9	Eye Dam. 1; H318	>= 1 - < 3 0
EC-No.	208-807-1	_, , ,	
LC NO.	200 007 1		
	*		
-methyl-2-butene	e-1-ol		
CAS-No.	556-82-1	Flam. Liq. 3; Acute Tox. 4;	>= 1 - < 3 °
EC-No.	209-141-4	Skin Corr. 1B; Eye Dam.	
		1; STOT SE 3; H226,	
	*	H302, H332, H314, H318,	
		H335	
egzadesil	502 91 7	Chin Irrit 2, Evo Irrit 2.	> 1 < 10
CAS-No.	593-81-7	Skin Irrit. 2; Eye Irrit. 2;	-
CAS-No. EC-No.	593-81-7 209-810-0	Skin Irrit. 2; Eye Irrit. 2; H315, H319	>= 1 - < 10 %
CAS-No. EC-No. Registration	209-810-0		-
CAS-No. EC-No.	209-810-0 01-2119492299-22-		-
CAS-No. EC-No. Registration	209-810-0		-
CAS-No. EC-No. Registration number R)-(-)-mandelic a	209-810-0 01-2119492299-22- XXXX cid	H315, H319	%
CAS-No. EC-No. Registration number R)-(-)-mandelic and CAS-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2		%
CAS-No. EC-No. Registration number R)-(-)-mandelic a	209-810-0 01-2119492299-22- XXXX cid	H315, H319	%
CAS-No. EC-No. Registration number R)-(-)-mandelic and CAS-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6	H315, H319	%
CAS-No. EC-No. Registration number R)-(-)-mandelic ad CAS-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 *	H315, H319	%
CAS-No. EC-No. Registration number R)-(-)-mandelic ad CAS-No. EC-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 * Ilcohol	H315, H319 Eye Dam. 1; H318	>= 1 - < 3 %
CAS-No. EC-No. Registration number R)-(-)-mandelic and CAS-No. EC-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 * <b>Ilcohol</b> 620-24-6	H315, H319 Eye Dam. 1; H318 Skin Irrit. 2; Eye Dam. 1;	-
CAS-No. EC-No. Registration number R)-(-)-mandelic ad CAS-No. EC-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 * Ilcohol	H315, H319 Eye Dam. 1; H318 Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318,	%
CAS-No. EC-No. Registration number R)-(-)-mandelic and CAS-No. EC-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 * <b>Ilcohol</b> 620-24-6	H315, H319 Eye Dam. 1; H318 Skin Irrit. 2; Eye Dam. 1;	%
CAS-No. EC-No. Registration number <b>R)-(-)-mandelic a</b> CAS-No. EC-No. <b>Hydroxybenzyl a</b> CAS-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 * ilcohol 620-24-6 210-633-6 *	H315, H319 Eye Dam. 1; H318 Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318,	%
CAS-No. EC-No. Registration number R)-(-)-mandelic and CAS-No. EC-No. EC-No.	209-810-0 01-2119492299-22- XXXX cid 611-71-2 210-276-6 * ilcohol 620-24-6 210-633-6 *	H315, H319 Eye Dam. 1; H318 Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318,	%



		I	
EC-No.	231-469-1	STOT SE 3; H315, H319,	%
		H335	
	*		
-methylpropionic	acid; isobutyric acid		
CAS-No.	79-31-2	Flam. Liq. 3; Acute Tox. 4;	>= 1 - < 3 %
EC-No.	201-195-7	Acute Tox. 3; Skin Corr.	
Index-No.	607-063-00-9	1B; Eye Dam. 1; H226,	
	*	H302, H311, H314, H318	
		11502, 11511, 11514, 11516	
ydroxytoluic acid			
CAS-No.	83-40-9	Acute Tox. 4; Skin Irrit. 2;	>= 1 - < 3 %
EC-No.	201-473-8	Eye Dam. 1; STOT SE 3;	
		H302, H315, H318, H335	
	*	,,	
landelic acid			
CAS-No.	90-64-2	Eye Dam. 1; H318	>= 1 - < 3 %
EC-No.	202-007-6		
Registration			
number	01-2120349224-60-		
	XXXX		
-aminophenol			
CAS-No.	95-55-6	Acute Tox. 4; Muta. 2;	>= 1 - < 10
EC-No.	202-431-1	H302, H332, H341	%
Index-No.	612-033-00-3	11002/11002/11012	
index no.	*		
,4-Dihydroxybenz	oic acid	·	
CAS-No.	99-50-3	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	202-760-0	STOT SE 3; H315, H319,	%
		H335	-
	*		
-hydroxybenzoic a	acid		
CAS-No.	99-96-7	Eye Dam. 1; STOT SE 3;	>= 1 - < 3 0
EC-No.	202-804-9	Н318, Н335	_
201101		11010,11000	
	*		
	xyphenylglycolic acid		
CAS-No.	14883-87-5	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	238-956-8	STOT SE 3; H315, H319,	%
		H335	
	*		
-(Dithiolan-3-yl)v		A	
CAS-No.	940-69-2	Acute Tox. 4; H302	>= 1 - < 10
EC-No.	221-710-9		%
	*		
	•		
-(2-Hydroxypheny		Skin Irrit 2: Eve Irrit 2:	> = 1 - < 10
-(2-Hydroxypheny CAS-No.	/l)propionic acid 495-78-3	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
		STOT SE 3; H315, H319,	>= 1 - < 10 %
			-



Hydroxyanthrani CAS-No.	548-93-6	Acute Tox. 4; Skin Irrit. 2;	>= 1 - < 10
EC-No.	208-962-5	Eye Irrit. 2; Carc. 2; STOT	%
		SE 3; H302, H332, H312,	
	*	H315, H319, H351, H335	
cAS-No.	919488-17-8	Acute Tox. 2; H300	>= 1 - < 10
		Acute 10x. 2, 11500	
EC-No.	688-583-3		%
	*		
droxypyruvic ac	id phosphate lithium sal	t	
		Acute Tox. 4; H302, H312	>= 1 - < 1
			%
	*		
Hydroxy-2-oxo-3	-phenylpropanoic acid		
CAS-No.	156-39-8	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 1
EC-No.	205-852-9	H315, H319	%
	*		
enol			Γ
CAS-No.	108-95-2	Acute Tox. 3; Skin Corr.	>= 1 - < 2
EC-No.	203-632-7	1B; Eye Dam. 1; Muta. 2;	%
Index-No.	604-001-00-2	STOT RE 2; Aquatic	
Registration	01-2119471329-32-	Chronic 2; H301, H331,	
-			
number	XXXX	H311, H314, H318, H341,	
		H373, H411	
		Concentration limits:	
		>= 3 %: Skin Corr. 1B,	
		H314; 1 - < 3 %: Skin	
		Irrit. 2, H315; 1 - < 3 %:	
		Eye Irrit. 2, H319;	
aleic acid CAS-No.	110-16-7	Acute Tox. 4; Skin Corr. 1;	>= 1 - < 3
EC-No.	203-742-5		· · · · ·
		Eye Dam. 1; Skin Sens. 1;	
Index-No.	607-095-00-3	STOT SE 3; H302, H312,	
Registration	01-2119488705-25-	H314, H318, H317, H335	
number	XXXX	Concentration limits:	
number	~~~~		
		>= 0.1 %: Skin Sens. 1,	
		H317;	
rylic acid			1
CAS-No.	79-10-7	Flam. Liq. 3; Acute Tox. 4;	>= 1 - < 2
EC-No.	201-177-9	Skin Corr. 1A; Eye Dam.	%
Index-No.	607-061-00-8		
THUEX-INO.		1; STOT SE 3; Aquatic	
	*	Acute 1; Aquatic Chronic	
			1
		2; H226, H302, H332,	
		2; H226, H302, H332, H312 H314 H318 H335	
		2; H226, H302, H332, H312, H314, H318, H335, H400, H411	



		Concentration limits: >= 1 %: STOT SE 3, H335;	
hexanoic acid			
CAS-No. EC-No. Registration number	142-62-1 205-550-7 01-2119978228-24- XXXX	Skin Corr. 1C; Eye Dam. 1; H314, H318 Concentration limits: > 60 %: 1C, ; 3 - 60 %: Eye Dam./Irrit. 1, ; 3 - 60 %: 2, ; 1 - 3 %: Eye Dam./Irrit. 2, ; 1 - 3 %: 2, ;	>= 1 - < 3 %
Aniline			
CAS-No. EC-No. Index-No.	62-53-3 200-539-3 612-008-00-7 *	Acute Tox. 3; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 2; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H301, H331, H311, H318, H317, H341, H351, H372, H400, H410 Concentration limits: >= 1 %: STOT RE 1, H372; 0.2 - < 1 %: STOT RE 2, H373; M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	>= 1 - < 2.5 %
tryptamine			
CAS-No. EC-No.	61-54-1 200-510-5 *	Acute Tox. 4; Eye Dam. 1; Skin Sens. 1A; H302, H318, H317	>= 1 - < 3 %
Serotonin hydrochl	oride		
CAS-No. EC-No.	153-98-0 628-480-2 *	Acute Tox. 3; Repr. 2; H301, H361	>= 1 - < 3 %
Dihydrocostisone			1
CAS-No. EC-No.	50-23-7 200-020-1	Repr. 1A; STOT RE 2; H360Df, H373	>= 1 - < 10 %
	*		
propionic acid			
CAS-No. EC-No. Index-No. Registration number	79-09-4 201-176-3 607-089-00-0 01-2119486971-24- XXXX	Flam. Liq. 3; Skin Corr. 1B; Eye Dam. 1; STOT SE 3; H226, H314, H318, H335 Concentration limits: >= 25 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin	>= 1 - < 3 %



		Irrit. 2, H315; 10 - < 25	
		%: Eye Irrit. 2, H319; >=	
		10 %: STOT SE 3, H335;	
	ophosphate hydrate	First Truck Dr. U210	. 1 . 10
CAS-No.	154804-51-0	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	212-464-3		%
	*		
3,4-Dihydroxypher CAS-No.	102-32-9	Chip Irrit 2, Evo Irrit 2,	>= 1 - < 10
		Skin Irrit. 2; Eye Irrit. 2;	-
EC-No.	203-024-1	H315, H319	%
	*		
3-Amino-4-hydrox	vbenzoic acid		
CAS-No.	1571-72-8	Acute Tox. 4; Skin Irrit. 2;	>= 1 - < 10
EC-No.	216-390-2	Eye Irrit. 2; STOT SE 3;	%
		H302, H315, H319, H335	
	*		
2-Amino-1H-pteric	lin-4-one		
CAS-No.	2236-60-4	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	218-799-1	STOT SE 3; H315, H319,	%
		H335	
	*		
1,4-Naphthoquino	I		
CAS-No.	571-60-8	Acute Tox. 4; Skin Irrit. 2;	>= 1 - < 2.5
EC-No.	209-336-4	Eye Dam. 1; STOT SE 3;	%
		Aquatic Chronic 3; H302,	
	*	H315, H318, H335, H412	
a-Hydroxy-ß,ß-din	nethyl-y-butyrolactone		
CAS-No.	599-04-2	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	209-963-3		%
	*		
	*		
2-Ketobutyric acid			
CAS-No.	600-18-0	Skin Corr. 1B; Eye Dam.	>= 1 - < 3 %
		Skin Corr. 1B; Eye Dam. 1; H314, H318	>= 1 - < 3 %
CAS-No.	600-18-0 209-986-9		>= 1 - < 3 %
CAS-No. EC-No.	600-18-0		>= 1 - < 3 %
CAS-No. EC-No. Ethylmalonic acid	600-18-0 209-986-9 *	1; H314, H318	
CAS-No. EC-No. Ethylmalonic acid CAS-No.	600-18-0 209-986-9 * 601-75-2	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
CAS-No. EC-No. Ethylmalonic acid	600-18-0 209-986-9 *	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319,	
CAS-No. EC-No. Ethylmalonic acid CAS-No.	600-18-0 209-986-9 * 601-75-2 210-007-2	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
CAS-No. EC-No. Ethylmalonic acid CAS-No. EC-No.	600-18-0 209-986-9 * 601-75-2	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319,	>= 1 - < 10
CAS-No. EC-No. Ethylmalonic acid CAS-No. EC-No. fumaric acid	600-18-0 209-986-9 * 601-75-2 210-007-2 *	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
CAS-No. EC-No. Ethylmalonic acid CAS-No. EC-No. EC-No. fumaric acid CAS-No.	600-18-0 209-986-9 * 601-75-2 210-007-2 * 110-17-8	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319,	>= 1 - < 10 %
CAS-No. EC-No. Ethylmalonic acid CAS-No. EC-No. fumaric acid CAS-No. EC-No.	600-18-0 209-986-9 * 601-75-2 210-007-2 * 110-17-8 203-743-0	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
CAS-No. EC-No. Ethylmalonic acid CAS-No. EC-No. EC-No. fumaric acid CAS-No.	600-18-0 209-986-9 * 601-75-2 210-007-2 * 110-17-8	1; H314, H318 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	%



number	XXXX		
4-aminobenzoic aci	id		
CAS-No.	150-13-0	Aquatic Chronic 3; H412	>= 1 - < 2.5
EC-No.	205-753-0		%
	*		
Benzylamine			
CAS-No.	100-46-9	Acute Tox. 4; Skin Corr.	>= 1 - < 3 %
EC-No.	202-854-1	1B; Eye Dam. 1; H302,	
Index-No.	612-047-00-X	H312, H314, H318	
	*		
3-hydroxybenzalde			T
CAS-No.	100-83-4	Skin Irrit. 2; Eye Irrit. 2;	>= 1 - < 10
EC-No.	202-892-9	H315, H319	%
	*		
			<u> </u>
B,5-Diiodo-L-thyroı CAS-No.	nine 1041-01-6	Aquatic Chronic 3; H412	>= 1 - < 2.5
EC-No.	213-867-7		>= 1 - < 2.5 %
	213-00/-/		70
	*		
valeric acid			
CAS-No.	109-52-4	Skin Corr. 1B; Eye Dam.	>= 1 - < 2.5
EC-No.	203-677-2	1; Aquatic Chronic 3;	%
Index-No.	607-143-00-3	H314, H318, H412	/0
Registration	01-2119448010-56-	11314, 11310, 11412	
number	XXXX		
glutaric acid	70000		
CAS-No.	110-94-1	Skin Corr. 1A; Eye Dam.	>= 1 - < 3 %
EC-No.	203-817-2	1; H314, H318	
	203 017 2	1, 1101 1, 11010	
	*		
pimelic acid			
CAS-No.	111-16-0	Eye Irrit. 2; STOT SE 3;	>= 1 - < 10
EC-No.	203-840-8	H319, H335	%
	*		
1-Hydroxy-3-metho			· · -
CAS-No.	1135-24-6	Eye Irrit. 2; H319	>= 1 - < 10
EC-No.	214-490-0		%
	*		
Pyrocatechol		•	
CAS-No.	120-80-9	Acute Tox. 3; Skin Irrit. 2;	>= 1 - < 3 %
EC-No.	204-427-5	Eye Dam. 1; Skin Sens. 1;	
Index-No.	604-016-00-4	Muta. 2; Carc. 1B; H301,	
	01-2119515921-43-	H311, H315, H318, H317,	
		111311.1313.13.1318.1318.1317.	1
Registration number	XXXX	H341, H350	

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Cyclopentanone			
CAS-No. EC-No. Index-No.	120-92-3 204-435-9 606-025-00-9 *	Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; H226, H315, H319	>= 1 - < 10 %
4-hydroxybenzaldel	ıyde		
CAS-No. EC-No. Registration number	123-08-0 204-599-1 01-2120784598-32- XXXX	Eye Dam. 1; STOT SE 3; H318, H335	>= 1 - < 3 %
Calcium phosphide			
CAS-No. EC-No. Index-No.	1305-99-3 215-142-0 015-003-00-2 *	Water-react 1; Acute Tox. 2; Acute Tox. 1; Acute Tox. 3; Eye Dam. 1; Aquatic Acute 1; H260, H300, H330, H311, H318, H400 M-Factor - Aquatic Acute: 100	>= 1 - < 2.5 %
2-pyridone			
CAS-No. EC-No.	142-08-5 205-520-3 *	Acute Tox. 3; H301	>= 1 - < 10 %

\*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

## 4.1 Description of first-aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance. First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.After contact with skin: rinse out with polyethylene glycol 400 or a mixture of polyethylene glycol 300/ethanol 2:1 and wash with plenty of water. If neither is available wash with plenty of water. If mether is available wash with plenty of water. Immediately take off contaminated clothing. Call a physician immediately.

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## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

## If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.Carbon dioxide (CO2) Dry powder

#### Unsuitable extinguishing media Water Foam

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus Hvdrogen chloride gas Hydrogen iodide Potassium oxides Sodium oxides Calcium oxide Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus Hvdrogen chloride gas Hydrogen iodide Potassium oxides Sodium oxides Lithium oxides Calcium oxide Mixture with combustible ingredients. Combustible. Vapors are heavier than air and may spread along floors. May not get in touch with: Water Development of hazardous combustion gases or vapours possible in the event of fire.

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## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## 5.4 Further information

Use water spray to cool unopened containers. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6:** Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

## Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Work under hood. Do not inhale substance/mixture. Keep workplace dry. Do not allow product to come into contact with water.

## Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

## Storage conditions

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Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Keep locked up or in an area accessible only to qualified or authorized persons. Never allow product to get in contact with water during storage. **Storage stability**Recommended storage temperature

-20 °C

## Storage class

Storage class (TRGS 510): 3: Flammable liquids

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

Ingredients with workplace control parameters

## 8.2 Exposure controls

## **Personal protective equipment**

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

## **Skin protection**

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. protective clothing

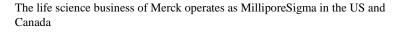
#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

required when dusts are generated.

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Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

## **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Do not let product enter drains.

## SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties

	•	<i>,</i>
a)	Physical state	solid
b)	Color	No data available
c)	Odor	No data available
d)	Melting point/freezing point	No data available
e)	Initial boiling point and boiling range	No data available
f)	Flammability (solid, gas)	No data available
g)	Upper/lower flammability or explosive limits	No data available
h)	Flash point	-40 °C
i)	Autoignition temperature	No data available
j)	Decomposition temperature	No data available
k)	рН	No data available
I)	Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m)	Water solubility	No data available
n)	Partition coefficient: n-octanol/water	No data available
o)	Vapor pressure	No data available
p)	Density	No data available
	Relative density	No data available
q)	Relative vapor density	No data available
r)	Particle	No data available

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characteristics

- s) Explosive properties No data available
- t) Oxidizing properties No data available

#### **9.2 Other safety information** No data available

#### **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

#### **10.2** Chemical stability

sensitive to moisture Stable under recommended storage conditions.

#### **10.3** Possibility of hazardous reactions

Violent reactions possible with:

#### **10.4** Conditions to avoid

Heat, flames and sparks. no information available

- **10.5 Incompatible materials** Strong oxidizing agents
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Mixture

## Acute toxicity

Acute toxicity estimate Oral - 200.28 mg/kg (Calculation method) Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acute toxicity estimate Inhalation - 4 h - 0.5001 mg/l - dust/mist(Calculation method)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Acute toxicity estimate Dermal - > 2,000 mg/kg (Calculation method)

#### Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

Remarks: Mixture causes serious eye damage.

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Risk of blindness!

**Respiratory or skin sensitization** Mixture may cause an allergic skin reaction.

## Germ cell mutagenicity

Evidence of genetic defects.

## Carcinogenicity

Possible carcinogen.

#### **Reproductive toxicity**

May harm the unborn child. Positive evidence from human epidemiological studies.

## **Specific target organ toxicity - single exposure** Mixture may cause respiratory irritation.

## Specific target organ toxicity - repeated exposure

Mixture causes damage to organs through prolonged or repeated exposure. - Blood

Aspiration hazard

No data available

## **11.2 Additional Information**

## **Endocrine disrupting properties**

## Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

#### Components

#### 3,5-Diiodo-L-tyrosine dihydrate

#### **Acute toxicity**

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

#### Skin corrosion/irritation

Remarks: No data available

#### Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

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## Germ cell mutagenicity

No data available

## Carcinogenicity

No data available

#### **Reproductive toxicity** No data available

## **Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

## potassium sorbate

## **Acute toxicity**

LD50 Oral - Rat - male and female - > 10,500 mg/kg Remarks: (ECHA) The value is given in analogy to the following substances: Sorbic acid LC50 Inhalation - Rat - 4 h - > 5.15 mg/l - dust/mist (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402) Remarks: The value is given in analogy to the following substances: Sorbic acid

## Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Eye irritation (OECD Test Guideline 405) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Respiratory or skin sensitization

Maximization Test - Guinea pig Result: negative (Regulation (EC) No. 440/2008, Annex, B.6) Remarks: The value is given in analogy to the following substances: Sorbic acid

## Germ cell mutagenicity

In vivo tests did not show mutagenic effects Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Result: negative Test Type: Ames test Test system: S. typhimurium Result: negative Remarks: The value is given in analogy to the following substances: Sorbic acid

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Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Result: positive Test Type: UDS (Unscheduled DNA synthesis assay) Test system: mammalian cells Result: negative Remarks: The value is given in analogy to the following substances: Sorbic acid Method: OECD Test Guideline 474 Species: Mouse - male and female - Bone marrow Result: negative Remarks: The value is given in analogy to the following substances: Sorbic acid

#### Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

#### Aspiration hazard

No data available

#### **3-Hydroxysalicylic acid**

#### Acute toxicity

LD50 Oral - Rabbit - > 3,000 mg/kg Remarks: (RTECS) Inhalation: Irritating to respiratory system. Dermal: No data available

#### Skin corrosion/irritation

Remarks: Causes skin irritation.

#### **Serious eye damage/eye irritation** Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

Carcinogenicity No data available

**Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

## Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard** No data available

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## oxalacetic acid

#### **Acute toxicity**

LD50 Oral - Rat - female - 2,000 - 5,000 mg/kg (OECD Test Guideline 423) Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - In vitro study Result: Causes serious eye irritation. - 6 h (OECD Test Guideline 492)

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

Carcinogenicity No data available

## Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

## 3,4-dihydroxycinnamic acid

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

## **Skin corrosion/irritation** No data available

Serious eye damage/eye irritation No data available

#### **Respiratory or skin sensitization** No data available

#### **Germ cell mutagenicity** No data available

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## Carcinogenicity

Suspected of causing cancer.

## Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

#### Indole-3-pyruvic acid monohydrate

#### **Acute toxicity**

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

## Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

**Carcinogenicity** No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

## Methyl vanillate

#### **Acute toxicity**

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available LD50 Intravenous - Mouse - 180 mg/kg

#### Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

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**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

**Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** No data available

Aspiration hazard No data available

#### Hydrocortisone 21-acetate

#### **Acute toxicity**

LD50 Oral - Rat - 5,000 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Food intake (animal). Vascular:Other changes. (RTECS) Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Result: negative

Carcinogenicity

No data available

#### **Reproductive toxicity**

May damage the unborn child. Suspected of damaging fertility.

#### Specific target organ toxicity - single exposure No data available

#### Specific target organ toxicity - repeated exposure

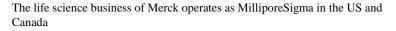
May cause damage to organs through prolonged or repeated exposure.

## Aspiration hazard

No data available

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#### Acetoin

#### **Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg (OECD Test Guideline 423) Inhalation: No data available LD50 Dermal - Rabbit - > 5,000 mg/kg

#### Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: No skin irritation (OECD Test Guideline 439)

#### Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** Direct Peptide Reactivity Assay (DPRA) Result: Not a skin sensitizer. (OECD Test Guideline 442C)

#### Germ cell mutagenicity

Test Type: reverse mutation assay Test system: Salmonella typhimurium Result: negative

Carcinogenicity No data available

## Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

## 2-Methylmalonic acid

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Remarks: Causes skin irritation.

**Serious eye damage/eye irritation** Remarks: Causes serious eye irritation.

#### **Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

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## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

## **Aspiration hazard**

No data available

## 4-(2-Aminoethyl)phenol

#### Acute toxicity

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

#### Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

#### **Respiratory or skin sensitization** No data available

## Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects. Species: Rat Remarks: Cytogenetic analysis Species: Mouse Remarks: Micronucleus test

#### Carcinogenicity No data available

**Reproductive toxicity** No data available

#### Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard**

No data available

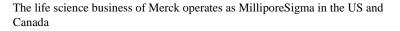
#### sodium benzoate

#### Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

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## Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: irritating - 24 h (OECD Test Guideline 405)

## Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Lungs Result: negative Remarks: (ECHA) Method: OECD Test Guideline 475 Species: Rat - male - Bone marrow Result: negative

## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

## **Aspiration hazard**

No data available

#### Nicotin

## Acute toxicity

Acute toxicity estimate Oral - 5 mg/kg (Expert judgment) Acute toxicity estimate Oral - 5 mg/kg (Expert judgment) Acute toxicity estimate Inhalation - 0.19 mg/l - dust/mist (Expert judgment) Acute toxicity estimate Inhalation - 0.19 mg/l - dust/mist (Expert judgment) Acute toxicity estimate Dermal - 70 mg/kg (Expert judgment) Acute toxicity estimate Dermal - 70 mg/kg (Expert judgment)

#### Skin corrosion/irritation

Skin - Rabbit Result: Irritating to skin. - 24 h

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(OECD Test Guideline 402)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes serious eye damage. (OECD Test Guideline 405)

#### **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

## Germ cell mutagenicity

Test Type: Micronucleus test Test system: human lymphoblastoid cells Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Result: negative Test Type: Ames test Test system: Salmonella typhimurium Result: negative

## Carcinogenicity

No data available

#### **Reproductive toxicity** Possible risk of congenital malformation in the fetus.

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

## **Aspiration hazard**

No data available

#### δ-Valerolactone

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

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#### Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

## 3-methyl-2-butene-1-ol

## **Acute toxicity**

LD50 Oral - Rat - male and female - 1,591 mg/kg (OECD Test Guideline 401) Symptoms: Nausea, Vomiting, gastric pain Oral: absorption Acute toxicity estimate Inhalation - 4 h - 11.1 mg/l - vapor (Expert judgment) Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract LD50 Dermal - Rabbit - male and female - > 4,000 mg/kg (OECD Test Guideline 402)

## Skin corrosion/irritation

Skin - Rabbit Result: Corrosive - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Remarks: Risk of blindness!

## **Respiratory or skin sensitization**

Human experience Result: negative Remarks: (ECHA)

## Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Result: negative Method: OECD Test Guideline 474 Species: Mouse - male - Red blood cells (erythrocytes) Result: negative

## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure

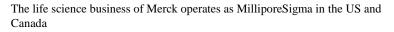
May cause respiratory irritation. Acute oral toxicity - Nausea, Vomiting, gastric pain Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

## Specific target organ toxicity - repeated exposure

No data available

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## Aspiration hazard

No data available

## Hegzadesil

#### **Acute toxicity**

LD50 Oral - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 401) Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Skin - Rabbit Result: Irritating to skin. - 20 h (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Irritating to eyes. (OECD Test Guideline 405)

#### **Respiratory or skin sensitization** No data available

## Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Result: negative Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Result: negative

#### Carcinogenicity

No data available

#### **Reproductive toxicity** No data available

Specific target organ toxicity - single exposure No data available

#### Specific target organ toxicity - repeated exposure

#### **Aspiration hazard**

No data available

## (R)-(-)-mandelic acid

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 5,000 mg/kg (OECD Test Guideline 401) Inhalation: No data available Dermal: No data available

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#### Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404) Remarks: No skin irritation

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Irreversible effects on the eye - 24 h (OECD Test Guideline 405) Remarks: Causes serious eye damage.

#### **Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

**Carcinogenicity** No data available

**Reproductive toxicity** No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

## 3-Hydroxybenzyl alcohol

#### **Acute toxicity**

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

## Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

#### **Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

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#### Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

## a-(Aminomethyl)benzyl alcohol

## **Acute toxicity**

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available LD50 Intraperitoneal - Mouse - 250 mg/kg

## Skin corrosion/irritation

Remarks: Causes skin irritation.

**Serious eye damage/eye irritation** Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

## 2-methylpropionic acid; isobutyric acid

#### **Acute toxicity**

Symptoms: After swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract. Inhalation: No data available LD50 Dermal - Rabbit - male - 474 mg/kg (OECD Test Guideline 402) Acute toxicity estimate Dermal - 474 mg/kg (ATE value derived from LD50/LC50 value)

## Skin corrosion/irritation

Skin - Rabbit Result: Corrosive - 1 h (OECD Test Guideline 404) Remarks: Tendency of poor wound-healing after penetration of the substance.

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#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Corrosive - 8 Days (Draize Test)

#### Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Result: negative Method: OECD Test Guideline 474 Species: Mouse - male and female - Red blood cells (erythrocytes) Result: negative

## Carcinogenicity

No data available

#### Reproductive toxicity No data available

## Specific target organ toxicity - single exposure

Acute oral toxicity - After swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract.

## **Specific target organ toxicity - repeated exposure** No data available

**Aspiration hazard** No data available

#### Hydroxytoluic acid

#### **Acute toxicity**

LD50 Oral - Rat - 445 mg/kg Inhalation: Irritating to respiratory system. Dermal: No data available

#### Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

#### **Germ cell mutagenicity** Test Type: Human

Test system: lymphocyte Remarks: DNA inhibition

Carcinogenicity No data available

#### Reproductive toxicity No data available

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#### Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

#### Mandelic acid

## Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Remarks: No data available

## Serious eye damage/eye irritation

Eyes - Bovine cornea Result: Causes serious eye damage. - 4 h (OECD Test Guideline 437)

## **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

## Carcinogenicity

No data available

**Reproductive toxicity** No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard** No data available

## 2-aminophenol

#### **Acute toxicity**

LD50 Oral - Rat - 951 mg/kg Remarks: Behavioral:Tremor. Cyanosis LC50 Inhalation - 4 h - 1.5 mg/l - dust/mist Dermal: No data available

#### Skin corrosion/irritation No data available

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Serious eye damage/eye irritation Eyes - Rabbit

Result: Mild eye irritation

**Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** In vitro tests showed mutagenic effects

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

#### 3,4-Dihydroxybenzoic acid

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

**Skin corrosion/irritation** Remarks: No data available

Remarks: NO uala avaliable

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** No data available

#### Carcinogenicity No data available

**Reproductive toxicity** No data available

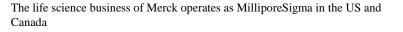
**Specific target organ toxicity - single exposure** May cause respiratory irritation. Remarks: No data available

**Specific target organ toxicity - repeated exposure** No data available

Aspiration hazard No data available

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#### 4-hydroxybenzoic acid

#### **Acute toxicity**

LD50 Oral - Rat - > 10,000 mg/kg Remarks: Behavioral:Muscle weakness. Lungs, Thorax, or Respiration:Dyspnea. (RTECS) Symptoms: Possible damages:, mucosal irritations LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg (US-EPA)

#### Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Risk of serious damage to eyes. - 1 h (OECD Test Guideline 405)

#### **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

#### Germ cell mutagenicity

Test Type: Micronucleus test Test system: Chinese hamster cells Result: negative Remarks: (ECHA) Test Type: Ames test Test system: Salmonella typhimurium Result: negative Test Type: Chromosome aberration test in vitro Test system: Chinese hamster cells Result: negative Remarks: (ECHA)

#### Carcinogenicity

No data available

#### **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure

Oral, Inhalation - May cause respiratory irritation. - Respiratory system Acute inhalation toxicity - Possible damages:, mucosal irritations

#### Specific target organ toxicity - repeated exposure

**Aspiration hazard** No data available

#### (+/-)-3,4-Dihydroxyphenylglycolic acid

## Acute toxicity

Oral: No data available

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Inhalation: No data available Dermal: No data available

**Skin corrosion/irritation** No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

**Carcinogenicity** No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

## 5-(Dithiolan-3-yl)valeramide

#### Acute toxicity

LD50 Oral - Rat - 1,980 mg/kg Remarks: (RTECS) Inhalation: No data available Dermal: No data available

**Skin corrosion/irritation** No data available

Serious eye damage/eye irritation No data available

#### **Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

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## 3-(2-Hydroxyphenyl)propionic acid

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

Carcinogenicity No data available

#### **Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

## **3-Hydroxyanthranilic acid**

## Acute toxicity

Acute toxicity estimate Oral - 500.1 mg/kg (Expert judgment) Acute toxicity estimate Inhalation - 4 h - 1.5 mg/l - dust/mist (Expert judgment) Acute toxicity estimate Dermal - 1,100 mg/kg (Expert judgment)

**Skin corrosion/irritation** Remarks: Causes skin irritation.

Serious eye damage/eye irritation Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

**Carcinogenicity** Suspected of causing cancer.

**Reproductive toxicity** No data available

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### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** 

No data available

## Deoxynivalenol-d1

## **Acute toxicity**

LD50 Oral - Mouse - 46 mg/kg Remarks: Gastrointestinal:Ulceration or bleeding from small intestine. Diarrhea (RTECS) The value is given in analogy to the following substances: Deoxynivalenol Acute toxicity estimate Oral - 46 mg/kg (Calculation method) Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Skin - Guinea pig Result: Mild skin irritation (Draize Test) Remarks: (RTECS) The value is given in analogy to the following substances: Deoxynivalenol

## Serious eye damage/eye irritation

No data available

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

Carcinogenicity No data available

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

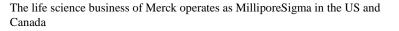
## Hydroxypyruvic acid phosphate lithium salt

#### Acute toxicity

LD50 Oral - 500.01 mg/kg Inhalation: No data available

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LD50 Dermal - 1,100 mg/kg

**Skin corrosion/irritation** No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

#### 3-Hydroxy-2-oxo-3-phenylpropanoic acid

Acute toxicity Oral: No data available Inhalation: No data available Dermal: No data available

**Skin corrosion/irritation** Remarks: Causes skin irritation.

**Serious eye damage/eye irritation** Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

**Carcinogenicity** No data available

Reproductive toxicity No data available

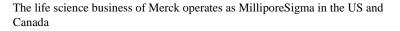
Specific target organ toxicity - single exposure No data available

**Specific target organ toxicity - repeated exposure** No data available

Aspiration hazard No data available

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## Phenol

#### **Acute toxicity**

Acute toxicity estimate Oral - 100.1 mg/kg (Expert judgment) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Acute toxicity estimate Inhalation - 4 h - 0.51 mg/l - dust/mist (Expert judgment) Symptoms: Irritation, Lung edema Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) LD50 Dermal - Rat - female - 660 mg/kg (OECD Test Guideline 402) Acute toxicity estimate Dermal - 660 mg/kg (ATE value derived from LD50/LC50 value)

#### Skin corrosion/irritation

Skin - In vitro study Result: Causes burns. (OECD Test Guideline 431)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Corrosive (OECD Test Guideline 405) Remarks: Causes serious eye damage. Risk of blindness!

#### **Respiratory or skin sensitization**

Sensitisation test: - Guinea pig Result: negative Remarks: (IUCLID)

#### Germ cell mutagenicity

Suspected of causing genetic defects. Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster ovary cells Result: positive Test Type: Mutagenicity (mammal cell test): micronucleus. Test system: Chinese hamster ovary cells Result: positive

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

#### **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure

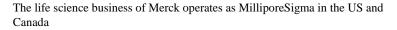
Acute inhalation toxicity - Irritation, Lung edema

## Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - Nervous system, Kidney, Liver, Skin Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

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## Aspiration hazard

No data available

#### maleic acid

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 1,090 mg/kg (OECD Test Guideline 401) Remarks: The value is given in analogy to the following substances: maleic anhydride Symptoms: Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Acute toxicity estimate Oral - 1,090 mg/kg (ATE value derived from LD50/LC50 value) Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Lung edema, Symptoms may be delayed. Acute toxicity estimate Dermal - 1,100 mg/kg (Expert judgment)

## Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes serious eye damage. (OECD Test Guideline 405)

#### Respiratory or skin sensitization

Maximization Test - Guinea pig Result: positive (OECD Test Guideline 406) Local lymph node assay (LLNA) - Mouse Result: positive (OECD Test Guideline 429) (Regulation (EC) No 1272/2008, Annex VI)

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### **Reproductive toxicity**

No data available

## Specific target organ toxicity - single exposure

May cause respiratory irritation. - Respiratory system Acute oral toxicity - Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Lung edema, Symptoms may be delayed.

## Specific target organ toxicity - repeated exposure

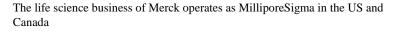
No data available

## Aspiration hazard

No data available

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## acrylic acid

#### **Acute toxicity**

LD50 Oral - Rat - male - 1,000 - < 2,000 mg/kg (OECD Test Guideline 423) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acute toxicity estimate Oral - 1,000 mg/kg (ATE value derived from LD50/LC50 value) LC50 Inhalation - Rat - male and female - 4 h - > 5.1 mg/l - vapor (OECD Test Guideline 403) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Acute toxicity estimate Dermal - 1,100 mg/kg (Expert judgment) Remarks: (Regulation (EC) No 1272/2008, Annex VI)

#### Skin corrosion/irritation

Skin - Rabbit Result: Causes severe burns. (OECD Test Guideline 404) Remarks: (Regulation (EC) No 1272/2008, Annex VI)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes burns. Remarks: (IUCLID) Remarks: Causes serious eye damage.

#### **Respiratory or skin sensitization**

Sensitisation test: - Guinea pig Result: negative Remarks: (Lit.)

#### Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Result: negative Remarks: (National Toxicology Program) Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells **Result:** negative Test Type: unscheduled DNA synthesis assay Test system: rat hepatocytes Result: negative Method: OECD Test Guideline 475 Species: Rat - male and female - Bone marrow Result: negative Species: Mouse - male and female - Intrauterine Result: negative Remarks: (ECHA)

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## Carcinogenicity

No data available

#### **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

### Specific target organ toxicity - repeated exposure

### **Aspiration hazard**

No data available

#### hexanoic acid

#### **Acute toxicity**

LD50 Oral - Rat - 3,000 mg/kg Remarks: (RTECS) Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, After a latency period:, Inhalation may lead to the formation of oedemas in the respiratory tract. LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402) Remarks: The value is given in analogy to the following substances: sebacic acid

#### Skin corrosion/irritation

Skin - Rabbit Result: Corrosive after 1 to 4 hours of exposure - 4 h (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Bovine cornea Result: Corrosive - 10 min (OECD Test Guideline 437) Remarks: Causes serious eye damage. Remarks: Lacrimal irritation due to vapours.

#### **Respiratory or skin sensitization**

No data available

#### Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

#### Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

## Specific target organ toxicity - single exposure

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, After a latency period:, Inhalation may lead to the formation of oedemas in the respiratory tract.

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#### Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

## Aniline

## **Acute toxicity**

LD50 Oral - Rat - 250 mg/kg Remarks: (RTECS) LC50 Inhalation - Rat - 4 h - 3.3 mg/l - vapor Remarks: (Lit.) (Regulation (EC) No 1272/2008, Annex VI) LC50 Inhalation - Rat - 4 h - 3.3 mg/l - vapor Remarks: (Lit.) (Regulation (EC) No 1272/2008, Annex VI) LD50 Dermal - Rabbit - 840 mg/kg Remarks: (Lit.)

## Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation Remarks: (Lit.)

## Serious eye damage/eye irritation

Remarks: Causes serious eye damage. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## **Respiratory or skin sensitization**

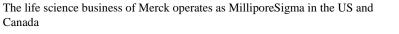
May cause allergic skin reaction. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Germ cell mutagenicity

Suspected of causing genetic defects. Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium **Result:** negative Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Result: positive Test Type: Chromosome aberration test in vitro Test system: Chinese hamster lung cells Result: positive Test Type: unscheduled DNA synthesis assay Test system: rat hepatocytes Result: negative Remarks: (ECHA) Method: OECD Test Guideline 474 Species: Rat - male - Bone marrow Result: positive Method: OECD Test Guideline 475 Species: Mouse - male and female - Bone marrow Result: positive Method: OECD Test Guideline 475 Species: Rat - male - Bone marrow

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Result: positive Method: OECD Test Guideline 478 Species: Rat - male Result: negative

#### Carcinogenicity

Suspected of causing cancer.

#### **Reproductive toxicity** No data available

#### Specific target organ toxicity - single exposure No data available

#### Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure. - Blood Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### **Aspiration hazard**

No data available

#### tryptamine

#### **Acute toxicity**

LD50 Oral - Rat - female - 300 - 2,000 mg/kg (OECD Test Guideline 423) Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation

Skin - EPISKIN Human Skin Model Test Result: No skin irritation (OECD Test Guideline 439)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Irreversible effects on the eye (OECD Test Guideline 405)

#### **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: Causes sensitization. (OECD Test Guideline 429)

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

## Carcinogenicity

No data available

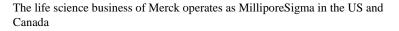
## **Reproductive toxicity**

No data available

Specific target organ toxicity - single exposure No data available

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## Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

## Serotonin hydrochloride

#### **Acute toxicity**

LD50 Oral - Mouse - 60 mg/kg Remarks: (RTECS) The value is given in analogy to the following substances: 3-(2-aminoethyl)indol-5-ol Acute toxicity estimate Oral - 60 mg/kg (ATE value derived from LD50/LC50 value) Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

Carcinogenicity No data available

**Reproductive toxicity** Suspected human reproductive toxicant

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

#### Dihydrocostisone

#### **Acute toxicity**

LD50 Oral - Rat - 5,000 mg/kg Remarks: (RTECS) Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** No data available

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## Germ cell mutagenicity

In vivo tests did not show mutagenic effects Method: OECD Test Guideline 474 Species: Mouse - male and female - Bone marrow Result: negative

### Carcinogenicity

No data available

#### **Reproductive toxicity**

May damage the unborn child. Positive evidence from human epidemiological studies.

Suspected of damaging fertility.

#### Specific target organ toxicity - single exposure No data available

#### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - Adrenal gland, Bone marrow

#### **Aspiration hazard**

No data available

#### propionic acid

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 3,455.1 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - male and female - 1 h - > 19.7 mg/l - vapor (OECD Test Guideline 403) LD50 Dermal - Rat - female - 3,235 mg/kg (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit Result: Corrosive Remarks: (ECHA) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes serious eye damage. - 24 h Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### **Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity

Test Type: sister chromatid exchange assay Test system: Chinese hamster lung cells Result: negative Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Method: OECD Test Guideline 474 Species: Chinese hamster - male and female - Bone marrow

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Result: negative

Carcinogenicity No data available

**Reproductive toxicity** 

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract

## Specific target organ toxicity - repeated exposure

### Aspiration hazard

No data available

## Disodium ß-glycerophosphate hydrate

#### Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 15 min (OECD Test Guideline 439) Remarks: The value is given in analogy to the following substances: βglycerophosphate disodium salt

#### Serious eye damage/eye irritation

Remarks: Causes serious eye irritation. (ECHA) The value is given in analogy to the following substances: ß-glycerophosphate disodium salt

## Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Remarks: The value is given in analogy to the following substances: ßglycerophosphate disodium salt

#### Carcinogenicity

No data available

#### Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

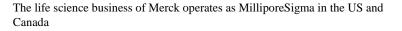
## Specific target organ toxicity - repeated exposure

## Aspiration hazard

No data available

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## 3,4-Dihydroxyphenylacetic acid

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

**Skin corrosion/irritation** Remarks: Causes skin irritation.

**Serious eye damage/eye irritation** Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

#### 3-Amino-4-hydroxybenzoic acid

## **Acute toxicity**

Oral: No data available LD50 Oral - Rat - 798.2 mg/kg Inhalation: Irritating to respiratory system. Dermal: No data available

#### Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

#### **Carcinogenicity** No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

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#### Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

## 2-Amino-1H-pteridin-4-one

#### **Acute toxicity**

Oral: No data available Inhalation: Irritating to respiratory system. Dermal: No data available

#### **Skin corrosion/irritation** Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

#### Carcinogenicity No data available

**Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

## 1,4-Naphthoquinol

#### **Acute toxicity**

LD50 Oral - 500.1 mg/kg Inhalation: Irritating to respiratory system. Dermal: No data available

**Skin corrosion/irritation** Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

**Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity No data available

Carcinogenicity No data available

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## **Reproductive toxicity**

No data available

#### **Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard**

No data available

### $\alpha$ -Hydroxy- $\beta$ , $\beta$ -dimethyl- $\gamma$ -butyrolactone

#### Acute toxicity

LD50 Oral - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 401) Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes serious eye irritation. (OECD Test Guideline 405)

#### **Respiratory or skin sensitization**

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

## Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Result: negative

## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard** No data available

No data available

## 2-Ketobutyric acid

#### **Acute toxicity**

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

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Symptoms: burns of mucous membranes Dermal: No data available

## Skin corrosion/irritation

Remarks: Causes skin burns.

#### **Serious eye damage/eye irritation** Remarks: Causes serious eye damage.

Respiratory or skin sensitization

No data available

**Germ cell mutagenicity** No data available

## Carcinogenicity

No data available

**Reproductive toxicity** No data available

## Specific target organ toxicity - single exposure

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acute inhalation toxicity - burns of mucous membranes

**Specific target organ toxicity - repeated exposure** No data available

#### **Aspiration hazard**

No data available

#### Ethylmalonic acid

#### Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation

Remarks: Causes skin irritation. The value is given in analogy to the following substances: 2-Methylmalonic acid

#### Serious eye damage/eye irritation

Remarks: Causes serious eye irritation. The value is given in analogy to the following substances: 2-Methylmalonic acid

#### **Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

## Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. The value is given in analogy to the following substances: 2-Methylmalonic acid

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## Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available

## fumaric acid

## **Acute toxicity**

LD50 Oral - Rat - male and female - 9,300 mg/kg (OECD Test Guideline 401) Symptoms: After uptake of large quantities:, Irritation of mucous membranes, Nausea LC50 Inhalation - Rat - male and female - 4 h - > 1.306 mg/l - dust/mist (OECD Test Guideline 403) Remarks: (highest concentration to be prepared) Symptoms: Possible damages:, Irritation symptoms in the respiratory tract. LD50 Dermal - Rabbit - female - 20,000 mg/kg (OECD Test Guideline 402)

## Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Eye irritation (OECD Test Guideline 405)

#### **Respiratory or skin sensitization**

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

## Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Result: negative Test Type: Ames test Test system: Salmonella typhimurium Result: negative Remarks: (National Toxicology Program)

## Carcinogenicity

No data available

#### **Reproductive toxicity** No data available

#### Specific target organ toxicity - single exposure

Acute oral toxicity - After uptake of large quantities:, Irritation of mucous membranes, Nausea Acute inhalation toxicity - Possible damages:, Irritation symptoms in the respiratory tract.

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## Specific target organ toxicity - repeated exposure

### **Aspiration hazard**

No data available

### 4-aminobenzoic acid

#### **Acute toxicity**

LD50 Oral - Rat - male and female - >= 5,000 mg/kg (OECD Test Guideline 401) Inhalation: No data available Dermal: No data available

## Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

## **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

## Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Result: negative Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Result: positive

## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure No data available

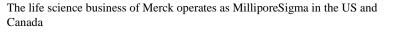
#### Specific target organ toxicity - repeated exposure

## **Aspiration hazard**

No data available

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#### Benzylamine

#### **Acute toxicity**

LD50 Oral - Rat - male - 1,127 mg/kg (OECD Test Guideline 401) Acute toxicity estimate Oral - 1,127 mg/kg (ATE value derived from LD50/LC50 value) LC50 Inhalation - Rat - male and female - 3 h - > 0.65 mg/l - vapor (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - 1,350 mg/kg (OECD Test Guideline 402) Acute toxicity estimate Dermal - 1,350 mg/kg (ATE value derived from LD50/LC50 value)

#### Skin corrosion/irritation

Skin - Rabbit Result: Causes burns. (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Corrosive (OECD Test Guideline 405) Remarks: Causes serious eye damage.

#### **Respiratory or skin sensitization**

No data available

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Result: negative Test Type: Micronucleus test Test system: Chinese hamster lung cells Result: negative Method: OECD Test Guideline 474 Species: Mouse - male - Bone marrow Result: negative

## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure No data available

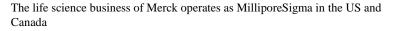
#### Specific target organ toxicity - repeated exposure

#### **Aspiration hazard**

No data available

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## 3-hydroxybenzaldehyde

#### **Acute toxicity**

Symptoms: Possible damages:, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Symptoms: Possible damages:, mucosal irritations Dermal: No data available

## Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** No data available

#### **Germ cell mutagenicity** No data available

**Carcinogenicity** No data available

## Reproductive toxicity

No data available

## Specific target organ toxicity - single exposure

Acute oral toxicity - Possible damages:, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Acute inhalation toxicity - Possible damages:, mucosal irritations

#### Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

#### 3,5-Diiodo-L-thyronine

#### Acute toxicity

LD50 Oral - Rat - female - > 2,000 mg/kg (OECD Test Guideline 423) Inhalation: No data available Dermal: No data available

#### **Skin corrosion/irritation** No data available

## Serious eye damage/eye irritation

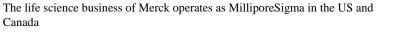
Eyes - EpiOcular Result: No eye irritation (OECD Test Guideline 492)

## Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

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Result: negative (OECD Test Guideline 429)

### Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Result: negative

Carcinogenicity No data available

#### **Reproductive toxicity** No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

#### valeric acid

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 4,600 mg/kg (OECD Test Guideline 401) Inhalation: No data available LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit Result: Causes burns. (OECD Test Guideline 404) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Corrosive Remarks: (ECHA)

#### **Respiratory or skin sensitization** No data available

#### Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Result: negative Method: OECD Test Guideline 474 Species: Mouse - male and female Result: negative

## Carcinogenicity

No data available

#### **Reproductive toxicity** No data available

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#### Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard**

No data available

#### glutaric acid

#### **Acute toxicity**

LD50 Oral - Mouse - 6,000 mg/kg Remarks: (RTECS) Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Symptoms: Possible damages:, mucosal irritations Dermal: No data available

## Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE) Result: Corrosive (OECD Test Guideline 431)

## Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

## Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

## Carcinogenicity

No data available

#### **Reproductive toxicity** No data available

## Specific target organ toxicity - single exposure

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acute inhalation toxicity - Possible damages:, mucosal irritations

**Specific target organ toxicity - repeated exposure** No data available

#### **Aspiration hazard**

No data available

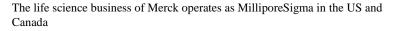
#### pimelic acid

#### **Acute toxicity**

LD50 Oral - Rat - 7,000 mg/kg Remarks: (RTECS) Inhalation: No data available Dermal: No data available

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Skin corrosion/irritation No data available

Serious eye damage/eye irritation Remarks: Causes serious eye irritation. (ECHA)

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

#### 4-Hydroxy-3-methoxycinnamic acid

#### **Acute toxicity**

LD50 Oral - Rat - 2,500 mg/kg Remarks: (RTECS) The value is given in analogy to the following substances: trans-cinnamic acidThe value is given in analogy to the following substances: Cinnamic acid

Inhalation: Irritating to respiratory system. Dermal: No data available

#### Skin corrosion/irritation

Skin - in vitro test Result: No skin irritation - 3 - 60 min (OECD Test Guideline 431) Remarks: The value is given in analogy to the following substances: trans-cinnamic acid

#### Serious eye damage/eye irritation

Remarks: Causes serious eye irritation. (ECHA) The value is given in analogy to the following substances: trans-cinnamic acid

**Respiratory or skin sensitization** No data available

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Remarks: The value is given in analogy to the following substances: trans-cinnamic acid

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## Carcinogenicity

No data available

## **Reproductive toxicity**

No data available

#### **Specific target organ toxicity - single exposure** No data available

Specific target organ toxicity - repeated exposure No data available

## Aspiration hazard

No data available

## Pyrocatechol

#### **Acute toxicity**

LD50 Oral - Rat - male - 300 mg/kg Remarks: (ECHA) Inhalation: No data available LD50 Dermal - Rat - male and female - 600 mg/kg (OECD Test Guideline 402) Remarks: (Regulation (EC) No 1272/2008, Annex VI)

## Skin corrosion/irritation

Skin - Rabbit Result: Irritating to skin. - 24 h (Draize Test)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes serious eye damage. - 24 - 72 h (Draize Test) Remarks: (ECHA)

#### Respiratory or skin sensitization

Freund's complete adjuvant test - Guinea pig Result: positive Remarks: (ECHA)

## Germ cell mutagenicity

Suspected of causing genetic defects. Test Type: Ames test Test system: Salmonella typhimurium Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Result: positive Species: Rat - male Result: positive Remarks: (ECHA)

#### Carcinogenicity

Presumed to have carcinogenic potential for humans

## **Reproductive toxicity**

No data available

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#### Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** 

No data available

## Cyclopentanone

### **Acute toxicity**

LD50 Oral - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - male - 4 h - > 19.5 mg/l - vapor (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

## Skin corrosion/irritation

Skin - Rabbit Result: Irritating to skin. - 4 h (OECD Test Guideline 404) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Irritating to eyes. (OECD Test Guideline 405) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Respiratory or skin sensitization

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Result: negative

### Carcinogenicity

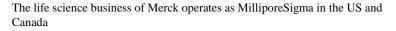
No data available

#### **Reproductive toxicity** No data available

## Specific target organ toxicity - single exposure No data available

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#### Specific target organ toxicity - repeated exposure

### Aspiration hazard

No data available

### 4-hydroxybenzaldehyde

#### **Acute toxicity**

LD50 Oral - Rat - 3,980 mg/kg (OECD Test Guideline 401) Symptoms: Possible damages:, mucosal irritations Dermal: No data available

## Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

Eyes - Bovine cornea Result: Causes serious eye damage. - 4 h (OECD Test Guideline 437)

#### **Respiratory or skin sensitization**

Direct Peptide Reactivity Assay (DPRA) - In vitro study Result: negative (OECD Test Guideline 442C)

## Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative

#### Carcinogenicity

No data available

#### Reproductive toxicity No data available

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. Acute inhalation toxicity - Possible damages:, mucosal irritations

#### Specific target organ toxicity - repeated exposure No data available

No dala avallable

#### **Aspiration hazard** No data available

#### **Calcium phosphide**

#### **Acute toxicity**

Acute toxicity estimate Oral - 5.1 mg/kg (Expert judgment) Acute toxicity estimate Inhalation - 4 h - 0.01 mg/l - dust/mist (Expert judgment) Acute toxicity estimate Dermal - 500 mg/kg (Expert judgment)

## Skin corrosion/irritation

No data available

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#### **Serious eye damage/eye irritation** Remarks: Causes serious eye damage. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

#### 2-pyridone

#### **Acute toxicity**

LD50 Oral - Rat - 124 mg/kg Inhalation: No data available Dermal: No data available

**Skin corrosion/irritation** No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitization** No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

**Specific target organ toxicity - single exposure** No data available

**Specific target organ toxicity - repeated exposure** No data available

**Aspiration hazard** No data available

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## **SECTION 12: Ecological information**

## **12.1 Toxicity**

**Mixture** 

No data available

- 12.2 Persistence and degradability No data available
- 12.3 Bioaccumulative potential No data available

#### **12.4 Mobility in soil** No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Endocrine disrupting properties **Product:**

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 12.7 Other adverse effects

Very toxic to aquatic life with long lasting effects.

#### Components

#### Components

## 3,5-Diiodo-L-tyrosine dihydrate

No data available

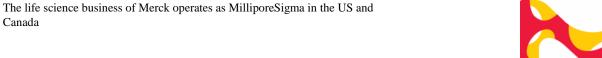
## potassium sorbate

Toxicity to fish	static test LC50 - Danio rerio (zebra fish) - > 1,000 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 982 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - 77 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: Sorbic acid
	static test NOEC - Pseudokirchneriella subcapitata - 56 mg/l - 72 h (OECD Test Guideline 201)

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	Remarks: The value is given in analogy to the following substances: Sorbic acid
Toxicity to bacteria	static test EC50 - activated sludge - > 100 mg/l - 72 h (OECD Test Guideline 209) Remarks: The value is given in analogy to the following substances: Sorbic acid
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - 50 mg/l - 21 d (OECD Test Guideline 211) Remarks: The value is given in analogy to the following substances: The value is given in analogy to the following substances: Sorbic acid

## **3-Hydroxysalicylic acid**

Toxicity to daphnia	EC50 - Daphnia magna (Water flea) - 447 mg/l - 48 h
and other aquatic	Remarks: (ECOTOX Database)
invertebrates	

#### oxalacetic acid

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 31.19 mg/l - 72 h (OECD Test Guideline 201)
	static test NOEC - Pseudokirchneriella subcapitata (green algae) - 3.28 mg/l - 72 h (OECD Test Guideline 201)

## 3,4-dihydroxycinnamic acid

No data available

## Indole-3-pyruvic acid monohydrate

No data available

#### Methyl vanillate

No data available

#### Hydrocortisone 21-acetate

Toxicity to bacteria

## Acetoin

Toxicity to fish

LC50 - Leuciscus idus (Golden orfe) - > 2,200 mg/l - 96 h LC0 - Leuciscus idus (Golden orfe) - 2,200 mg/l - 48 h

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Toxicity to bacteria

## 2-Methylmalonic acid

No data available

NO UALA AVAIIADIE		
<b>4-(2-Aminoethyl)phenol</b> No data available		
aadium kanaata		
<b>sodium benzoate</b> Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 484 mg/l - 96 h (US-EPA)	
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - > 100 mg/l - 96 h Remarks: (ECHA)	
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)	
Toxicity to fish(Chronic toxicity)	semi-static test LC50 - Danio rerio (zebra fish) - 1,400 - 1,500 mg/l - 24 h Remarks: (ECHA)	
Nicotin Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 4 mg/l - 96 h Remarks: (ECOTOX Database)	
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 3 mg/l - 48 h (OECD Test Guideline 202)	
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 37 mg/l - 72 h (OECD Test Guideline 201)	
Toxicity to bacteria	static test NOEC - activated sludge - 27 mg/l - 28 Days Remarks: (ECHA)	
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia pulex (Water flea) - 0.02 mg/l - 16 d (OECD Test Guideline 211)	
<b>δ-Valerolactone</b> No data available		
<b>3-methyl-2-butene-1-ol</b> Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - 46.4 mg/l - 96 h	

(DIN 38412 part 15)

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	Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 144 mg/l - 48 h (Directive 67/548/EEC, Annex V, C.2.)
	Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 72 h (DIN 38412)
Heg	zadesil	
_	Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h (DIN 38412)
	Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 259.13 mg/l - 48 h (Regulation (EC) No. 440/2008, Annex, C.2) Remarks: The value is given in analogy to the following substances: trimethylamine
	Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 150 mg/l - 72 h (DIN 38412)
(R)-(-)-mandelic acid No data available		
	Toxicity to daphnia and other aquatic	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

invertebrates (OECD Test Guideline 202)

**3-Hydroxybenzyl alcohol** 

No data available

## a-(Aminomethyl)benzyl alcohol

No data available

## 2-methylpropionic acid; isobutyric acid

Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - 146.6 mg/l - 96 h (DIN 38412 part 15)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 51.25 mg/l - 48 h (DIN 38412)
Toxicity to algae	static test EbC50 - Desmodesmus subspicatus (green algae) - 45.1 mg/l - 72 h (DIN 38412)
Toxicity to bacteria	EC50 - Pseudomonas putida - 57 mg/l - 17 h Remarks: (IUCLID)

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## Hydroxytoluic acid

No data available

## Mandelic acid

No data available

	Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
	Toxicity to algae	static test NOEC - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
2-ar	ninophenol	
	Toxicity to fish	LC50 - Leuciscus idus (Golden orfe) - 0.1 mg/l
	Toxicity to daphnia and other aquatic invertebrates	EC0 - Daphnia magna (Water flea) - 1 mg/l
		EC50 - Daphnia magna (Water flea) - 35 mg/l - 24 h

## 3,4-Dihydroxybenzoic acid

No data available

## 4-hydroxybenzoic acid

•	Toxicity to fish	flow-through test LC50 - Oryzias latipes - 92.8 mg/l - 96 h (OECD Test Guideline 203)
	Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h (OECD Test Guideline 202)
	Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - > 1,000 mg/l - 72 h (OECD Test Guideline 201)
	Toxicity to fish(Chronic toxicity)	flow-through test LC50 - Oryzias latipes - > 100 mg/l $$ - 14 d (OECD Test Guideline 204)
	Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - > 100 mg/l - 21 d (OECD Test Guideline 202)

## (+/-)-3,4-Dihydroxyphenylglycolic acid

No data available

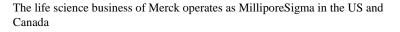
## 5-(Dithiolan-3-yl)valeramide

No data available

## **3-(2-Hydroxyphenyl)propionic acid** No data available

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## **3-Hydroxyanthranilic acid**

No data available

## Deoxynivalenol-d1

No data available

## Hydroxypyruvic acid phosphate lithium salt

No data available

## 3-Hydroxy-2-oxo-3-phenylpropanoic acid

No data available

#### Phenol

Filei	Toxicity to fish	flow-through test LC50 - Onchorhynchus clarki - 8.9 mg/l - 96 h (US-EPA)
	Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Ceriodaphnia dubia (water flea) - 3.1 mg/l - 48 h (US-EPA)
	Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata (algae) - 61.1 mg/l - 96 h (US-EPA)
	Toxicity to bacteria	static test IC50 - microorganisms - 21 mg/l - 24 h Remarks: (ECHA)
	Toxicity to fish(Chronic toxicity)	semi-static test NOEC - Fish - 0.077 mg/l - 60 d Remarks: (ECHA)
	Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - 0.16 mg/l - 16 d Remarks: (ECHA)
maleic acid		
	Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 42.81 mg/l - 48 h (OECD Test Guideline 202)
	Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 74.35 mg/l - 72 h (OECD Test Guideline 201)
	Toxicity to bacteria	static test EC10 - Pseudomonas putida - 44.6 mg/l - 18 h (DIN 38 412 Part 8) Remarks: The value is given in analogy to the following substances: maleic anhydride
	Toxicity to daphnia and other aquatic	EC50 - Daphnia magna (Water flea) - 77 mg/l - 21 d Remarks: The value is given in analogy to the following

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invertebrates(Chronic toxicity)	substances: (ECHA) The value is given in analogy to the following substances: maleic anhydride
<b>acrylic acid</b> Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 27 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	flow-through test EC50 - Daphnia magna (Water flea) - 95 mg/l - 48 h (US-EPA)
Toxicity to algae	IC50 - Desmodesmus subspicatus (green algae) - 0.13 mg/l - 72 h (Regulation (EC) No. 440/2008, Annex, C.3) Remarks: (IUCLID)
	EC10 - Desmodesmus subspicatus (green algae) - 0.03 mg/l - 72 h (Regulation (EC) No. 440/2008, Annex, C.3) Remarks: (ECHA)
Toxicity to bacteria	static test NOEC - activated sludge - 100 mg/l - 30 min (ISO 8192)
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Oryzias latipes - >= $10.1 \text{ mg/l} - 45 \text{ d}$ (OECD Test Guideline 210)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - Daphnia magna (Water flea) - 3.8 mg/l - 21 d (US-EPA)
hexanoic acid	
Toxicity to fish	static test LC50 - Pimephales promelas (fathead minnow) - 88 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 72 mg/l - 48 h (OECD Test Guideline 202) Remarks: The value is given in analogy to the following substances: heptanoic acid; oenanthic acid
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - 56.4 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: heptanoic acid; oenanthic acid
Toxicity to daphnia	semi-static test NOEC - Daphnia magna (Water flea) - 17.9
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and other aquatic invertebrates(Chronic toxicity)	mg/l - 21 d (OECD Test Guideline 211) Remarks: The value is given in analogy to the following substances: The value is given in analogy to the following substances: heptanoic acid; oenanthic acid
<b>Aniline</b> Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 10.6 mg/l - 96.0 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 0.16 mg/l - 48 h (US-EPA)
Toxicity to algae	static test ErC50 - Chlorella pyrenoidosa - 175 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	EC50 - activated sludge - 2,500 mg/l - 10 min Remarks: (Lit.)
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - Pimephales promelas (fathead minnow) - 0.39 mg/l - 32 d Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - Daphnia magna (Water flea) - 0.01 mg/l - 21 d (US-EPA)
tryptamine	
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 12.91 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 3.85 mg/l - 72 h (OECD Test Guideline 201)
Serotonin hydrochloride	
No data available	
Dihydrocostisone	
Toxicity to daphnia and other aquatic	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

(OECD Test Guideline 202)

# **propionic acid** Toxicity to fish

invertebrates

static test LC50 - Leuciscus idus (Golden orfe) - > 10,000 mg/l - 96 h (DIN 38412)

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	Remarks: The value is given in analogy to the following substances: calcium dipropionate
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h (Directive 67/548/EEC, Annex V, C.2.) Remarks: The value is given in analogy to the following substances: calcium dipropionate
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: calcium dipropionate
Toxicity to bacteria	EC50 - Pseudomonas putida - 60 mg/l - 17 h (DIN 38412) Remarks: (IUCLID)

## Disodium ß-glycerophosphate hydrate

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202) Remarks: The value is given in analogy to the following substances: β-glycerophosphate disodium salt

Toxicity to algae static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: ß-glycerophosphate disodium salt

## 3,4-Dihydroxyphenylacetic acid

No data available

**3-Amino-4-hydroxybenzoic acid** No data available

## 2-Amino-1H-pteridin-4-one

No data available

## 1,4-Naphthoquinol

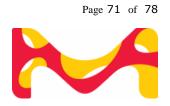
No data available

## $a-Hydroxy-\beta,\beta-dimethyl-\gamma-butyrolactone$

Toxicity to daphnia and other aquatic

EC50 - Daphnia magna (Water flea) - > 100 mg/l  $\,$  - 48 h (OECD Test Guideline 202)

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invertebrates	Remarks: No toxicity at the limit of solubility.
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 63 mg/l - 72 h (OECD Test Guideline 201)
2-Ketobutyric acid	
No data available	
Ethylmalonic acid	
No data available	
<b>fumaric acid</b> Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (OECD Test Guideline 201)
	static test NOEC - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test EC50 - activated sludge - > 300 mg/l - 3 h (OECD Test Guideline 209)
4-aminobenzoic acid	
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia - 10.32 mg/l - 48 h Remarks: (ECHA) The value / statement given is based on a (Q)SAR approach
Toxicity to bacteria	microtox test EC50 - Photobacterium phosphoreum - 27.4 mg/l - 30 min Remarks: (Lit.)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	NOEC - Daphnia - 0.337 mg/l - 21 d Remarks: (ECHA) The value / statement given is based on a (Q)SAR approach
<b>Benzylamine</b> Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - > 100 mg/l - 96 h (DIN 38412 part 15)
Toxicity to daphnia and other aquatic	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
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invertebrates	(OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 50 mg/l - 72 h (OECD Test Guideline 201)
3-hydroxybenzaldehyde	

No data available

## 3,5-Diiodo-L-thyronine

Toxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - > 24.02 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Desmodesmus subspicatus (green algae) - > 20.89 mg/l - 72 h (OECD Test Guideline 201)valeric acid Toxicity to fishLC50 - Pimephales promelas (fathead minnow) - 77 mg/l - 96 h Remarks: (ECOTOX Database)Toxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - 88.1 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products)Joxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidstatic test ErC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 201)glutaric acidstatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidstatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 730 mg/l - 72 h (OECD Test Guideline 201)pimelic acidstatic test NOEC - Pseudokirchneriella subcapitata (green algae) - 72 h (OECD	5,5-Dilodo-L-cityronine			
20.89 mg/l - 72 h (OECD Test Guideline 201)valeric acid Toxicity to fishLC50 - Pimephales promelas (fathead minnow) - 77 mg/l - 96 h Remarks: (ECOTOX Database)Toxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - 88.1 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidstatic test EC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test EC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)	and other aquatic	- 48 h		
Toxicity to fishLC50 - Pimephales promelas (fathead minnow) - 77 mg/l - 96 h Remarks: (ECOTOX Database)Toxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - 88.1 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidToxicity to daphnia and other aquatic invertebratesToxicity to daphnia and other aquatic invertebratesstatic test ErC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)	Toxicity to algae	20.89 mg/l - 72 h		
Toxicity to fishLC50 - Pimephales promelas (fathead minnow) - 77 mg/l - 96 h Remarks: (ECOTOX Database)Toxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - 88.1 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidToxicity to daphnia and other aquatic invertebratesToxicity to daphnia and other aquatic invertebratesstatic test ErC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)	valeric acid			
and other aquatic invertebratesh (OECD Test Guideline 202) Remarks: (in analogy to similar products)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidstatic test EC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)Static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)		h		
algae) - 29.3 mg/l - 72 h (OECD Test Guideline 201)glutaric acidToxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h (OECD Test Guideline 202)Toxicity to algaestatic test EC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)	and other aquatic	h (OECD Test Guideline 202)		
Toxicity to daphnia and other aquatic invertebratesstatic test EC50 - Daphnia magna (Water flea) - 6,840 mg/l - 48 h 	Toxicity to algae	algae) - 29.3 mg/l - 72 h		
and other aquatic invertebrates48 h (OECD Test Guideline 202)Toxicity to algaestatic test ErC50 - Pseudokirchneriella subcapitata (green algae) - 738 mg/l - 72 h (OECD Test Guideline 201)static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)	glutaric acid			
algae) - 738 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - Pseudokirchneriella subcapitata (green algae) - 320 mg/l - 72 h (OECD Test Guideline 201)	and other aquatic	48 h		
- 320 mg/l - 72 h (OECD Test Guideline 201)	Toxicity to algae	algae) - 738 mg/l - 72 h		
pimelic acid		- 320 mg/l - 72 h		
	pimelic acid			

No data available

## 4-Hydroxy-3-methoxycinnamic acid

Toxicity to daphnia	semi-static test EC50 - Daphnia magna (Water flea) - 32 mg/l
and other aquatic	- 48 h
invertebrates	(OECD Test Guideline 202)

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	Remarks: The value is given in analogy to the following substances: trans-cinnamic acid
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 19 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: trans-cinnamic acid
<b>Pyrocatechol</b> Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 9.22 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 1.09 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	ErC50 - Chlorella vulgaris (Fresh water algae) - 22 mg/l - 96 h (OECD Test Guideline 201)
<b>Cyclopentanone</b> Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 209)
4-hydroxybenzaldehyde	
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 41.1 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 37.93 mg/l - 72 h (OECD Test Guideline 201)
Calcium phosphide	
No data available	

**2-pyridone** No data available

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## SECTION 13: Disposal considerations

## **13.1 Waste treatment methods**

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product.

SECI	SECTION 14: Transport information			
14.1	UN numb	•-		
	ADR/RID:	3316	IMDG: 3316	IATA: 3316
14.2	<b>14.2 UN proper shipping name</b> ADR/RID: CHEMICAL KIT (acrylic acid) IMDG: CHEMICAL KIT (acrylic acid) IATA: Chemical kit (acrylic acid)			
14.3	Transport ADR/RID:	t hazard class(es) 9	IMDG: 9	IATA: 9
14.4	Packagin ADR/RID:		IMDG: II	IATA: II
14.5	<b>Environm</b> ADR/RID:	<b>ental hazards</b> yes	IMDG Marine pollutant: yes	IATA: no
14.6 Special precautions for user				
	Further in	formation :	No data available	

## SECTION 15: Regulatory information

# **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

#### **National legislation**

Seveso III: Directive 2012/18/EU of the H2 ACUTE TOXIC European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

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: Pyrocatechol

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- E1 ENVIRONMENTAL HAZARDS
- O3 OTHER HAZARDS

## **Other regulations**

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

Full text of	H-Statements
H226	Flammable liquid and vapor.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH029	Contact with water liberates toxic gas.
EUH032	Contact with acids liberates very toxic gas.

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## Full text of other abbreviations

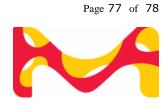
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Classification of the mixture**

#### **Classification procedure:**

		•
Acute Tox.3	H301	Calculation method
Acute Tox.3	H331	Calculation method
Skin Corr.1	H314	Calculation method
Eye Dam.1	H318	Calculation method
Skin Sens.1	H317	Calculation method
Muta.2	H341	Calculation method
Carc.1B	H350	Calculation method
Repr.1A	H360D	Calculation method
STOT SE3	H335	Calculation method
STOT RE1	H372	Calculation method
Aquatic Acute1	H400	Calculation method
Aquatic Chronic3	H412	Calculation method

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## **Further information**

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