09/15/2021	Kit Components		
Product code	Description		
E6110	ONE-Glo [™] Luciferase Assay System		
Components:			
E605A	ONE-Glo [™] Luciferase Assay Buffer		
E606A	ONE-Glo [™] Luciferase Assay Substrate	ONE-Glo [™] Luciferase Assay Substrate	



Printing date 09/15/2021

Reviewed on 09/15/2021

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1 Identification

Product identifier Trade name: <u>ONE-Glo™ Luciferase Assay Buffer</u>

Article number: E605A Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330 SDS author: ChemicalRegulatory@promega.com Emergency telephone number: For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). *Hazard pictograms*



Signal word Warning Hazard statements Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Precautionary statements Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. IF exposed or concerned: Get medical advice/attention. Store locked up.

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Printing date 09/15/2021

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Trade name: ONE-Glo™ Luciferase Assay Buffer

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Dispose of contents/container in accordance with local/regional/national/international regulations. Classification system: NFPA ratings (scale 0 - 4) Health = 1Fire = 0*Reactivity* = 0HMIS-ratings (scale 0 - 4) *Health* = 1Fire = 0 Reactivity = 0OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable Target Organ(s): Not applicable or unknown **Other hazards Results of PBT and vPvB assessment PBT:** Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of hazardous and non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:

62-56-6 thiourea

4 First-aid measures

Description of first aid measures

After inhalation: If the patient feels unwell or is concerned, obtain medical advice. After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed None

No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture None known No further relevant information available.

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Printing date 09/15/2021

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Trade name: ONE-GloTM Luciferase Assay Buffer

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Advice for firefighters No special advice

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Remove persons from danger area.
Wear protective clothing.
Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling No special precautions are necessary if used correctly. **Information about protection against explosions and fires:** The product is not flammable.

Conditions for safe storage, including any incompatibilities Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light. **Information about storage in one common storage facility:** Not required. **Further information about storage conditions:** None. **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

Protective gloves

Select the glove material considering penetration time, rate of diffusion and degradation time.

It is recommended that the selected protective gloves be tested and approved under NIOSH or EU Directive 89/686/EEC and the standard EN 374 derived from it.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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Reviewed on 09/15/2021

Trade name: ONE-Glo™ Luciferase Assay Buffer

(Contd. of page 3)

Eye protection: Use equipment for eye protection tested and approved under government NIOSH standards.

Information on basic physical and c	chemical properties		
General Information			
Appearance:			
Form:	Fluid		
Color:	Colorless		
Odor:	Odorless No. 4 January 10 January		
Odor threshold:	Not determined.		
pH-value at 20 °C (68 °F):	6.7		
Change in condition			
Melting point/Melting range:	0 °C (32 °F)		
Boiling point/Boiling range:	100 °C (212 °F)		
Flash point:	Not applicable.		
Flammability (solid, gaseous):	Not applicable.		
Decomposition temperature:	Not determined.		
Auto igniting:	Product is not selfigniting.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
Vapor pressure:	Not determined.		
Density at 20 °C (68 °F):	1.02 g/cm³ (8.5119 lbs/gal)		
Relative density	Not determined.		
Vapor density	Not determined.		
Evaporation rate	Not determined.		
Solubility in / Miscibility with			
Water:	Fully miscible.		
Partition coefficient (n-octanol/wate	er): Not determined.		
Viscosity:			
Dynamic at 20 °C (68 °F):	0.0952 mPas		
Kinematic:	Not determined.		
Solvent separation test			
Organic solvents:	0.5 %		
Water:	95.1 %		
VOC content:	0.52 %		
Solids content:	0.8 %		
Other information	No further relevant information available.		

10 Stability and reactivity

Reactivity No further relevant information available. **Chemical stability Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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Trade name: ONE-GloTM Luciferase Assay Buffer

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Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No further relevant information available. Incompatible materials: No further relevant information available. Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: No data available Primary irritant effect: on the skin: No data available. on the eye: No data available. Sensitization: No sensitizing effects known. Additional toxicological information: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

62-56-6 thiourea

NTP (National Toxicology Program)

62-56-6 thiourea

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment Persistence and degradability *Not available* No further relevant information available. **Bioaccumulative potential** Not known No further relevant information available. Mobility in soil No further relevant information available. Ecotoxicological effects: **Remark:** Not available Additional ecological information: General notes: No data available. **Results of PBT and vPvB assessment PBT:** Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

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Printing date 09/15/2021

Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Buffer

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13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

UN-Number DOT, ADR, IMDG, IATA	Not hazardous for transportation Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	None Not applicable	
Transport hazard class(es)	None	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, ADR, IMDG, IATA	None Not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
UN "Model Regulation":	Not applicable	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

62-56-6 thiourea

TSCA (Toxic Substances Control Act) Inventory:

62-56-6 thiourea

Hazardous Air Pollutants

67-56-1 methanol

Proposition 65

Chemicals known to cause cancer:

62-56-6 thiourea

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Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Buffer

Chemica	(Contd. of pa Is known to cause reproductive toxicity for females:
	he ingredients are listed.
	ls known to cause reproductive toxicity for males:
· ·	he ingredients are listed.
	ls known to cause developmental toxicity:
67-56-1	methanol
	ey Right-to-Know List:
	dimethyl sulfoxide
62-56-6	
67-56-1	methanol
Pennsylv	ania Right-to-Know List:
62-56-6	thiourea
Cancero	genity categories
	vironmental Protection Agency)
None of t	he ingredients are listed.
TLV (Th	reshold Limit Value)
,	he ingredients are listed.
NIOSH-	Ca (National Institute for Occupational Safety and Health)
	he ingredients are listed.
Signal w Hazard s	el elements The product is classified and labeled according to the Globally Harmonized System (GHS ord Warning tatements d of organize organ
	l of causing cancer. l of damaging fertility or the unborn child.
	onary statements
Obtain sp	pecial instructions before use.
	andle until all safety precautions have been read and understood.
	tective gloves/protective clothing/eye protection/face protection. ed or concerned: Get medical advice/attention.
Store loc	
Dispose of	of contents/container in accordance with local/regional/national/international regulations. I safety assessment
Waton be	zard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 **Contact: Date of preparation / last revision** 09/15/2021 / 3.0

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Reviewed on 09/15/2021

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Trade name: ONE-Glo™ Luciferase Assay Buffer

Abbrev	iations	and	acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) *VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent* LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Carc. 2: Carcinogenicity - Category 2 Repr. 2: Reproductive toxicity – Category 2



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1 Identification

Product identifier Trade name: <u>ONE-Glo[™] Luciferase Assay Substrate</u>

Article number: E606A Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330 SDS author: ChemicalRegulatory@promega.com

Emergency telephone number: For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture The product is not classified as hazardous according to the Globally Harmonized System (GHS). Label elements GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable Classification system: NFPA ratings (scale 0 - 4) Health = 0Fire = 0*Reactivity* = 0HMIS-ratings (scale 0 - 4) *Health* = 0Fire = 0*Reactivity* = 0**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):** Not applicable Target Organ(s): Not applicable or unknown **Other hazards** Results of PBT and vPvB assessment *PBT:* Not applicable. vPvB: Not applicable.

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Printing date 09/15/2021

Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Substrate

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3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of hazardous and non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components: Not applicable

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed None

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required. **Environmental precautions:** Do not allow to enter sewers/surface or ground water. **Methods and material for containment and cleaning up:** Pick up mechanically. **Reference to other sections**

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling No special measures required.

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Printing date 09/15/2021

Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Substrate

Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light. Information about storage in one common storage facility: Not required. Further information about storage conditions: None. Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment: General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Breathing equipment: Not required. **Protection of hands:** Not required. Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and General Information	chemical properties	
Appearance:		
Form:	Solid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C (68 °F):	6.7	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:	· · ·	
Lower:	Not determined.	
Upper:	Not determined.	
		(Contd. on page 4)

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Printing date 09/15/2021

Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Substrate

		(Contd. of page 2
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	1.09 g/cm ³ (9.09605 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Soluble.	
Partition coefficient (n-octanol/	water): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent separation test		
Water:	82.7 %	
VOC content:	0.00 %	
Solids content:	100.0 %	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No further relevant information available. Incompatible materials: No further relevant information available. Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: No data available Primary irritant effect: on the skin: No irritant effect. on the eye: No irritating effect. Sensitization: No sensitizing effects known. Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

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Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Substrate

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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment Persistence and degradability *Not available* No further relevant information available. **Bioaccumulative potential** Not known No further relevant information available. Mobility in soil No further relevant information available. Ecotoxicological effects: **Remark:** Not available Additional ecological information: General notes: Not known to be hazardous to water. Results of PBT and vPvB assessment *PBT:* Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* 14 Transport information

UN-Number DOT, ADR, ADN, IMDG, IATA	Not hazardous for transportation Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	None Not applicable	
Transport hazard class(es)	None	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, ADR, IMDG, IATA	None Not applicable	

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Trade name: ONE-GloTM Luciferase Assay Substrate

		(Contd. of page 5)
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.	
UN "Model Regulation":	Not applicable	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:

Hazardous Air Pollutants

None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

New Jersey Right-to-Know List:

None of the ingredients are listed.

Pennsylvania Right-to-Know List:

None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

GHS label elements Not applicable Signal word Not applicable Hazard statements Not applicable

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Reviewed on 09/15/2021

Trade name: ONE-GloTM Luciferase Assay Substrate

Chemical safety assessment

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison. WI Ph:(608)274-4330 Contact: Date of preparation / last revision 09/15/2021 / 3.0 Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: Internation Civil Aviation Organization ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

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