

## 1 Identification

- **Product identifier**
- **Trade name:** 39767 Problem Plastic
- **Article number:** 39767
- **Application of the substance / the mixture** Adhesives
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SEM Products Inc.  
1685 Overview Drive  
Rock Hill, SC 29730  
803 207 8225
- **Information department:**  
cust\_care@semproducts.com : SEM Products, Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT
- **Emergency telephone number:** CHEMTREC 1-800-424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



- Acute Tox. 4 H302 Harmful if swallowed.
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- STOT SE 3 H335 May cause respiratory irritation.

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



- **Signal word** Warning
- **Hazard-determining components of labeling:**  
bisphenolA(chloro)oxirane polymer  
2,4,6-tris(dimethylaminomethyl)phenol  
CERAMIC MICROSPHERES  
BISPHENOL F EPOXY RESIN  
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane
- **Hazard statements**  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.

Trade name: 39767 Problem Plastic

(Contd. of page 1)

**Precautionary statements**

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves / eye protection / face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P330 Rinse mouth.
- P302+P352 If on skin: Wash with plenty of water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P321 Specific treatment (see on this label).
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**

**NFPA ratings (scale 0 - 4)**



**HMIS-ratings (scale 0 - 4)**



**Other hazards**

**Results of PBT and vPvB assessment**

- PBT:** Not applicable.
- vPvB:** Not applicable.

**3 Composition/information on ingredients**

**Chemical characterization: Mixtures**

**Description:**

Mixture: consisting of the following components.  
Weight percentages

**Dangerous components:**

|            |                                       |          |
|------------|---------------------------------------|----------|
| 66402-68-4 | CERAMIC MICROSPHERES                  | 13-30%   |
| 25068-38-6 | bisphenolA(chloro)oxirane polymer     | 10-13%   |
| 28064-14-4 | BISPHENOL F EPOXY RESIN               | 5-7%     |
| 90-72-2    | 2,4,6-tris(dimethylaminomethyl)phenol | ≥1.5-<5% |

(Contd. on page 3)



Trade name: 39767 Problem Plastic

(Contd. of page 2)

|            |   |          |
|------------|---|----------|
| 68909-14-8 | Modified diglycidal ether                     | 1-1.5%   |
| 84-74-2    | dibutyl phthalate                             | ≥0.1-≤1% |
| 17557-23-2 | 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane | ≥0.1-<1% |

#### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** 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:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **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:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

|                 |                                       |                       |
|-----------------|---------------------------------------|-----------------------|
| · <b>PAC-1:</b> |                                       |                       |
| 25068-38-6      | bisphenolA(chloro)oxirane polymer     | 90 mg/m <sup>3</sup>  |
| 28064-14-4      | BISPHENOL F EPOXY RESIN               | 30 mg/m <sup>3</sup>  |
| 90-72-2         | 2,4,6-tris(dimethylaminomethyl)phenol | 6.5 mg/m <sup>3</sup> |
| 13463-67-7      | titanium dioxide                      | 30 mg/m <sup>3</sup>  |

(Contd. on page 4)



**Trade name: 39767 Problem Plastic**

(Contd. of page 3)

|            |  |                         |
|------------|--|-------------------------|
| 84-74-2    | dibutyl phthalate                            | 15 mg/m <sup>3</sup>    |
| 280-57-9   | triethylenediamine                           | 5.1 mg/m <sup>3</sup>   |
| 919-30-2   | 3-aminopropyltriethoxysilane                 | 1.9 mg/m <sup>3</sup>   |
| 2530-83-8  | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 9.3 mg/m <sup>3</sup>   |
| 67762-90-7 | FUMED SILICA                                 | 120 mg/m <sup>3</sup>   |
| 107-21-1   | ethanediol                                   | 30 ppm                  |
| 14808-60-7 | Quartz (SiO <sub>2</sub> )                   | 0.075 mg/m <sup>3</sup> |
| 64-17-5    | ethanol                                      | 1,800 ppm               |
| 67-56-1    | methanol                                     | 530 ppm                 |

**· PAC-2:**

|            |  |                         |
|------------|--|-------------------------|
| 25068-38-6 | bisphenolA(chloro)oxirane polymer            | 990 mg/m <sup>3</sup>   |
| 28064-14-4 | BISPHENOL F EPOXY RESIN                      | 330 mg/m <sup>3</sup>   |
| 90-72-2    | 2,4,6-tris(dimethylaminomethyl)phenol        | 72 mg/m <sup>3</sup>    |
| 13463-67-7 | titanium dioxide                             | 330 mg/m <sup>3</sup>   |
| 84-74-2    | dibutyl phthalate                            | 1,600 mg/m <sup>3</sup> |
| 280-57-9   | triethylenediamine                           | 56 mg/m <sup>3</sup>    |
| 919-30-2   | 3-aminopropyltriethoxysilane                 | 21 mg/m <sup>3</sup>    |
| 2530-83-8  | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 100 mg/m <sup>3</sup>   |
| 67762-90-7 | FUMED SILICA                                 | 1,300 mg/m <sup>3</sup> |
| 107-21-1   | ethanediol                                   | 150 ppm                 |
| 14808-60-7 | Quartz (SiO <sub>2</sub> )                   | 33 mg/m <sup>3</sup>    |
| 64-17-5    | ethanol                                      | 3300* ppm               |
| 67-56-1    | methanol                                     | 2,100 ppm               |

**· PAC-3:**

|            |  |                         |
|------------|--|-------------------------|
| 25068-38-6 | bisphenolA(chloro)oxirane polymer            | 5,900 mg/m <sup>3</sup> |
| 28064-14-4 | BISPHENOL F EPOXY RESIN                      | 2,000 mg/m <sup>3</sup> |
| 90-72-2    | 2,4,6-tris(dimethylaminomethyl)phenol        | 430 mg/m <sup>3</sup>   |
| 13463-67-7 | titanium dioxide                             | 2,000 mg/m <sup>3</sup> |
| 84-74-2    | dibutyl phthalate                            | 9300* mg/m <sup>3</sup> |
| 280-57-9   | triethylenediamine                           | 340 mg/m <sup>3</sup>   |
| 919-30-2   | 3-aminopropyltriethoxysilane                 | 350 mg/m <sup>3</sup>   |
| 2530-83-8  | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 230 mg/m <sup>3</sup>   |
| 67762-90-7 | FUMED SILICA                                 | 7,900 mg/m <sup>3</sup> |
| 107-21-1   | ethanediol                                   | 900 ppm                 |
| 14808-60-7 | Quartz (SiO <sub>2</sub> )                   | 200 mg/m <sup>3</sup>   |
| 64-17-5    | ethanol                                      | 15000* ppm              |
| 67-56-1    | methanol                                     | 7200* ppm               |

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling**  
No special measures required.

(Contd. on page 5)

Trade name: 39767 Problem Plastic

(Contd. of page 4)

- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

### 84-74-2 dibutyl phthalate

|     |                                      |
|-----|--------------------------------------|
| PEL | Long-term value: 5 mg/m <sup>3</sup> |
| REL | Long-term value: 5 mg/m <sup>3</sup> |
| TLV | Long-term value: 5 mg/m <sup>3</sup> |

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **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.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 6)

Trade name: 39767 Problem Plastic

(Contd. of page 5)

· Eye protection:



Tightly sealed goggles

**9 Physical and chemical properties**

· Information on basic physical and chemical properties

· General Information

· Appearance:

|                   |                                    |
|-------------------|------------------------------------|
| Form:             | Liquid                             |
| Color:            | According to product specification |
| · Odor:           | Characteristic                     |
| · Odor threshold: | Not determined.                    |

· pH-value: Not determined.

· Change in condition

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | >260 °C       |

· Flash point: 218 °C

· 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.  
In use, may form flammable/explosive vapour-air mixture.

· Explosion limits:

|        |                 |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

· Vapor pressure: Not determined.

|                     |                          |
|---------------------|--------------------------|
| · Density at 20 °C: | 1.6112 g/cm <sup>3</sup> |
| · Relative density  | Not determined.          |
| · Vapor density     | Not determined.          |
| · Evaporation rate  | Not determined.          |

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

|            |                 |
|------------|-----------------|
| Dynamic:   | Not determined. |
| Kinematic: | Not determined. |

· Solvent content:

|                   |        |
|-------------------|--------|
| Organic solvents: | 0.0 %  |
| Water:            | 0.1 %  |
| VOC content:      | 0.00 % |

(Contd. on page 7)



Trade name: 39767 Problem Plastic

(Contd. of page 6)

**Solids content:** 98.9 %  
**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:**

**84-74-2 dibutyl phthalate**

|        |      |                       |
|--------|------|-----------------------|
| Oral   | LD50 | 8,000 mg/kg (rat)     |
| Dermal | LD50 | 20,000 mg/kg (rabbit) |

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful  
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

|            |                  |    |
|------------|------------------|----|
| 13463-67-7 | titanium dioxide | 2B |
| 14808-60-7 | Quartz (SiO2)    | I  |
| 64-17-5    | ethanol          | I  |

· **NTP (National Toxicology Program)**

|            |               |   |
|------------|---------------|---|
| 14808-60-7 | Quartz (SiO2) | K |
|------------|---------------|---|

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

(Contd. on page 8)



Trade name: 39767 Problem Plastic

(Contd. of page 7)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

|  |                 |
|--|-----------------|
| · <b>UN-Number</b>   | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>UN proper shipping name</b>   | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>Transport hazard class(es)</b>  | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>Class</b>   | Void            |
| · <b>Packing group</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Environmental hazards:</b>  |                 |
| · <b>Marine pollutant:</b>   | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

USA

(Contd. on page 9)





Trade name: 39767 Problem Plastic

(Contd. of page 8)

**15 Regulatory information**

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

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

68909-14-8 Modified diglycidal ether

84-74-2 dibutyl phthalate

107-21-1 ethanediol

67-56-1 methanol

· TSCA (Toxic Substances Control Act):

66402-68-4 CERAMIC MICROSPHERES

1317-65-3 GROUND CALCIUM CARBONATE

25068-38-6 bisphenolA(chloro)oxirane polymer

28064-14-4 BISPHENOL F EPOXY RESIN

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

13463-67-7 titanium dioxide

68909-14-8 Modified diglycidal ether

84-74-2 dibutyl phthalate

17557-23-2 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane

280-57-9 triethylenediamine

919-30-2 3-aminopropyltriethoxysilane

2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane

67762-90-7 FUMED SILICA

107-21-1 ethanediol

51274-00-1 YELLOW IRON OXIDE

14808-60-7 Quartz (SiO2)

64-17-5 ethanol

67-56-1 methanol

7732-18-5 water

· TSCA new (21st Century Act) (Substances not listed)

68909-14-8 Modified diglycidal ether

· Proposition 65

· Chemicals known to cause cancer:

25068-38-6 bisphenolA(chloro)oxirane polymer

28064-14-4 BISPHENOL F EPOXY RESIN

13463-67-7 titanium dioxide

107-21-1 ethanediol

14808-60-7 Quartz (SiO2)

· Chemicals known to cause reproductive toxicity for females:

84-74-2 dibutyl phthalate

(Contd. on page 10)

Trade name: 39767 Problem Plastic

(Contd. of page 9)

· **Chemicals known to cause reproductive toxicity for males:**

|         |                   |
|---------|-------------------|
| 84-74-2 | dibutyl phthalate |
|---------|-------------------|

· **Chemicals known to cause developmental toxicity:**

|         |                   |
|---------|-------------------|
| 84-74-2 | dibutyl phthalate |
|---------|-------------------|

|          |            |
|----------|------------|
| 107-21-1 | ethanediol |
|----------|------------|

|         |         |
|---------|---------|
| 64-17-5 | ethanol |
|---------|---------|

|         |          |
|---------|----------|
| 67-56-1 | methanol |
|---------|----------|

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

|         |                   |   |
|---------|-------------------|---|
| 84-74-2 | dibutyl phthalate | D |
|---------|-------------------|---|

· **TLV (Threshold Limit Value established by ACGIH)**

|            |                  |    |
|------------|------------------|----|
| 13463-67-7 | titanium dioxide | A4 |
|------------|------------------|----|

|          |            |    |
|----------|------------|----|
| 107-21-1 | ethanediol | A4 |
|----------|------------|----|

|            |                            |    |
|------------|----------------------------|----|
| 14808-60-7 | Quartz (SiO <sub>2</sub> ) | A2 |
|------------|----------------------------|----|

|         |         |    |
|---------|---------|----|
| 64-17-5 | ethanol | A3 |
|---------|---------|----|

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

|            |                  |
|------------|------------------|
| 13463-67-7 | titanium dioxide |
|------------|------------------|

|            |                            |
|------------|----------------------------|
| 14808-60-7 | Quartz (SiO <sub>2</sub> ) |
|------------|----------------------------|

|         |          |
|---------|----------|
| 67-56-1 | methanol |
|---------|----------|

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

bisphenolA(chloro)oxirane polymer

2,4,6-tris(dimethylaminomethyl)phenol

CERAMIC MICROSPHERES

BISPHENOL F EPOXY RESIN

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane

· **Hazard statements**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 11)

**Trade name: 39767 Problem Plastic**

(Contd. of page 10)

- P301+P312 *If swallowed: Call a poison center/doctor if you feel unwell.*
- P330 *Rinse mouth.*
- P302+P352 *If on skin: Wash with plenty of water.*
- P304+P340 *IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
- P305+P351+P338 *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P362+P364 *Take off contaminated clothing and wash it before reuse.*
- P333+P313 *If skin irritation or rash occurs: Get medical advice/attention.*
- P321 *Specific treatment (see on this label).*
- P337+P313 *If eye irritation persists: Get medical advice/attention.*
- P363 *Wash contaminated clothing before reuse.*
- P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
- P405 *Store locked up.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **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:** Environment protection department.

· **Contact:** Rita Joiner (rjoiner@semproducts.com)

· **Date of preparation / last revision** 03/14/2018 / 11

· **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: International Civil Aviation Organisation*

*ADR: Accord européen sur le transport 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*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*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*

*Acute Tox. 4: Acute toxicity – Category 4*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*

*Skin Sens. 1: Skin sensitisation – Category 1*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

· **\* Data compared to the previous version altered.**