



Safety Data Sheet
according to Regulation (EC)
No. 2015/830



SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

| | | | |
|--|--|-------------------------|------------|
| 1.1 Product Identifier | 10PTS | Revision Date: | 01/06/2017 |
| Product Name: | PHENOLINE TANK SHIELD - A | Supersedes Date: | 12/05/2017 |
| | | Version Number: | 1 |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | Base component of 2 components coating - Industrial use. | | |
| Product to be mixed with: | PHENOLINE TANK SHIELD - B | | |
| Mixing ratio by volume Part A/ Part B: | 1 / 1 | | |
| 1.3 Details of the supplier of the safety data sheet | | | |
| Importer: | StonCor Europe 9, Rue du Travail - 1400 Nivelles, Belgium | | |
| Manufacturer: | Carboline Italia, S.p.a. Via Margherita Vigano' De Vizzi . n 77 20092 Cinisello Balsamo (MI) Italy | | |
| | Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 02253751 Cinisello Balsamo, Italy | | |
| Datasheet Produced by: | Solvesi, Anna - ehs@stoncor.com | | |
| 1.4 Emergency telephone number: | CHEMTREC +1 703 5273887 (Outside US) PPC +1 412 6816669 (Outside US) Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma)(24h/24h) Emergenza ambientale +39 335-601 32 88 / +39 347-949 84 88 / +39 348-246 90 99 | | |

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

| | |
|---|---------|
| Other EU extensions | EUH205 |
| Skin Corrosion, category 1C | H314-1C |
| Skin Sensitizer, category 1 | H317 |
| Reproductive Toxicity, category 1A | H360F |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 |

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700), phenol, polymer with formaldehyde, glycidyl ether, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane

HAZARD STATEMENTS

| | | |
|---|---------|--|
| Other EU extensions | EUH205 | Contains epoxy constituents. May produce an allergic reaction. |
| Skin Corrosion, category 1C | H314-1C | Causes severe skin burns and eye damage. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| Reproductive Toxicity, category 1A | H360F | May damage fertility. |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 | Toxic to aquatic life with long lasting effects. |

PRECAUTION PHRASES

| | |
|----------------|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362+364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

No information

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

| <u>CAS-No.</u> | <u>EINEC No.</u> | <u>Name According to EEC</u> | <u>%</u> |
|----------------|------------------|---|----------|
| 25068-38-6 | 500-033-5 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) | 75-100 |
| 30499-70-8 | | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane | 10-25 |
| 28064-14-4 | 608-164-0 | phenol, polymer with formaldehyde, glycidyl ether | 2.5-10 |
| 64742-82-1 | 265-185-4 | Naphtha (petroleum), hydrodesulfurized heavy | 0.1-1.0 |

| <u>CAS-No.</u> | <u>REACH Reg No.</u> | <u>CLP Symbols</u> | <u>CLP Hazard Statements</u> | <u>M-Factors</u> |
|----------------|----------------------|--------------------|------------------------------|------------------|
| 25068-38-6 | 01-2119456619-26 | GHS07-GHS09 | H315-317-319-411 | |

30499-70-8

28064-14-4

64742-82-1 01-2119458049-33

GHS05-GHS07-GHS08-GHS09

GHS07-GHS09

GHS02-GHS07-GHS08-GHS09

H314-317-360F-411

H315-317-319-411

H226-304-336-372-411

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Irritating to eyes. Irritating to skin. May cause sensitization by skin contact.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Contains epoxy constituents. See information supplied by the manufacturer.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: No Information

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (UK WELS)

| <u>Name</u> | <u>CAS-No.</u> | <u>LTEL ppm</u> | <u>STEL ppm</u> | <u>STEL mg/m3</u> | <u>LTEL mg/m3</u> |
|---|----------------|-----------------|-----------------|-------------------|-------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 25068-38-6 | | | | |
| 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane | 30499-70-8 | | | | |
| phenol, polymer with formaldehyde, glycidyl ether | 28064-14-4 | | | | |
| Naphtha (petroleum), hydrodesulfurized heavy | 64742-82-1 | | | | |

| <u>Name</u> | <u>CAS-No.</u> | <u>OEL Note</u> |
|---|----------------|-----------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 25068-38-6 | |
| 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane | 30499-70-8 | |
| phenol, polymer with formaldehyde, glycidyl ether | 28064-14-4 | |
| Naphtha (petroleum), hydrodesulfurized heavy | 64742-82-1 | |

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with a vapor filter. Use compressed air or fresh air breathing apparatus in closed compartments. Wear respiratory protection with combination filter (dust and gas filter, EN 141) during spraying operations: Gas filter type A1 (organic substances). Dust filter P3 (for fine dust).

EYE PROTECTION: Tightly fitting safety goggles. Safety glasses with side-shields conforming to EN166.

HAND PROTECTION: Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron. Protective gloves complying with EN 374: Nitrile rubber. Butyl rubber.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

EC No.:
500-033-5**CAS-No.:**
25068-38-6**DNELs - Derived no effect level**

| Route of Exposure | Workers | | | | Consumers | | | |
|-------------------|--------------------|------------------------|-----------------------|--------------------------|--------------------|------------------------|-----------------------|--------------------------|
| | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic |
| Oral | Not required | | | | | 0.75 mg/kg bw/day | | 0.75 mg/kg bw/day |
| Inhalation | | 12.25 mg/m3 | | 12.25 mg/m3 | | | | |
| Dermal | | 8.33 mg/kg bw/day | | 8.33 mg/kg bw/day | | 3.571 mg/kg bw/day | | 3.571 mg/kg bw/day |

PNEC's - Predicted no effect concentration

| | |
|--|--------------|
| Environmental protection target | PNEC |
| Fresh water | 0.006 mg/l |
| Fresh water sediments | |
| Marine water | 0.0006 mg/l |
| Marine sediments | 0.0996 mg/kg |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | 0.196 mg/kg |
| Air | |

Chemical Name:

1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane

EC No.:**CAS-No.:**
30499-70-8**DNELs - Derived no effect level**

| Route of Exposure | Workers | | | | Consumers | | | |
|-------------------|--------------------|------------------------|-----------------------|--------------------------|--------------------|------------------------|-----------------------|--------------------------|
| | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic |
| Oral | Not required | | | | | | | |
| Inhalation | | | | 1.17 mg/m ³ | | | | |
| Dermal | | | | 670 µg/kg bw/day | | | | |

PNEC's - Predicted no effect concentration

| | |
|--|------------------------|
| Environmental protection target | PNEC |
| Fresh water | 3.7 µg/L |
| Fresh water sediments | 19.9 µg/kg sediment dw |
| Marine water | 370 ng/L |
| Marine sediments | 1.99 µg/kg sediment dw |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | |
| Air | |

Chemical Name:

Naphtha (petroleum), hydrodesulfurized heavy

EC No.:

265-185-4

CAS-No.:

64742-82-1

DNELs - Derived no effect level

| Route of Exposure | Workers | | | | Consumers | | | |
|-------------------|--------------------|------------------------|-----------------------|--------------------------|--------------------|------------------------|-----------------------|--------------------------|
| | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic |
| Oral | Not required | | | | | | | 26 mg/kg |
| Inhalation | | | | 330 mg/m3 | | | | 71 mg/m3 |
| Dermal | | | | 44 mg/kg | | | | 26 mg/kg |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|--|------|
| Fresh water | |
| Fresh water sediments | |
| Marine water | |
| Marine sediments | |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | |
| Air | |

SECTION 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

| | |
|---|----------------|
| Appearance: | viscous liquid |
| Physical State | LIQUID |
| Odor | Epoxy |
| Odor threshold | Not determined |
| pH | N/A |
| Melting point / freezing point (°C) | Not determined |
| Boiling point/range (°C) | 65 - 336 °C |
| Flash Point, (°C) | 74 |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | Not determined |
| Upper/lower flammability or explosive limits | Not determined |
| Vapour Pressure | N/D |
| Vapour density | Not determined |
| Relative density | Not determined |
| Solubility in / Miscibility with water | N/D |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature (°C) | Not determined |
| Decomposition temperature (°C) | Not determined |
| Viscosity | Not determined |
| Explosive properties | Not determined |
| Oxidising properties | Not determined |

9.2 Other information

| | |
|--|------|
| VOC Content g/l: | 20 |
| Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2. | |
| Specific Gravity (g/cm ³) | 1.15 |

SECTION 10: Stability and Reactivity**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

No Information

10.5 Incompatible materials

Strong oxidizing agents. Acids and bases. Amines.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological Information**11.1 Information on toxicological effects****Acute Toxicity:**

Oral LD50: No test

Inhalation LC50: No test

Irritation: Irritant

Corrosivity: No information available.

Sensitization: May cause an allergic skin reaction.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Name According to EEC</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|---|----------------------|--------------------------------|-------------------|
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 5000 mg/kg rat, oral | >2000 mg/kg dermal, rat M-F | |

| | | | | |
|------------|---|------------------------|--|---------------------------|
| 30499-70-8 | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane | > 2000 mg/kg (rat) | 3170 mg/kg bw (rat) OECD Guideline 402 (Acute Dermal Toxicity) | |
| 28064-14-4 | phenol, polymer with formaldehyde, glycidyl ether | 5000 mg/kg. oral, rat | >2000 mg/kg, rabbit | 29 mg/l inhalation, rat F |
| 64742-82-1 | Naphtha (petroleum), hydrodesulfurized heavy | >5000 mg/kg, rat, oral | | |

Additional Information:

No Information

SECTION 12: Ecological Information**12.1 Toxicity:**

EC50 48hr (Daphnia): No information

IC50 72hr (Algae): No information

LC50 96hr (fish): No information

12.2 Persistence and degradability: No information**12.3 Bioaccumulative potential:** No information**12.4 Mobility in soil:** No information**12.5 Results of PBT and vPvB assessment:** No information**12.6 Other adverse effects:** No information

| <u>CAS-No.</u> | <u>Name According to EEC</u> | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------------|---|---|---|---|
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 1.8mg/l (Daphnia magna, EC50, 48h,static) | 11 mg/l (Scenedesmus capricornutum, EC50r, 72h) | 1.5 mg/L (Rainbow trout), 3.6 mg/L (fish) |
| 30499-70-8 | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane | No information | No information | 75 mg/l Linee Guida 202 per il Test dell'OECD |
| 28064-14-4 | phenol, polymer with formaldehyde, glycidyl ether | No information | No information | 1.5 mg/l (fish) |
| 64742-82-1 | Naphtha (petroleum), hydrodesulfurized heavy | No information | No information | |

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

| <u>CAS-No.</u> | <u>Name According to EEC</u> |
|----------------|---|
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) |
| 30499-70-8 | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane |
| 28064-14-4 | phenol, polymer with formaldehyde, glycidyl ether |

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: 08 01 11*
Packaging Waste Code: 15 01 10

SECTION 14: Transport Information

| | | |
|------|--|--|
| 14.1 | UN number | UN 1760 |
| 14.2 | UN proper shipping name | .CORROSIVE LIQUIDS, N.O.S., (1,3-Propandiolo,2-etil-2-(hidrossimetil)-, polimero con 2-(chorometil)ossirane) |
| | Technical name | 1,3-Propandiolo,2-etil-2-(hidrossimetil)-, polimero con 2-(chorometil)ossirane |
| 14.3 | Transport hazard class(es) | 8 |
| | Subsidiary shipping hazard | Not applicable |
| 14.4 | Packing group | III |
| 14.5 | Environmental hazards | Marine Pollutant: YES (Trimetilolpropano triglicidil etere; 1,3-Propandiolo, 2-etil-2-(idrossimetil)-,polimero con 2-(clorometil)ossirano) |
| 14.6 | Special precautions for user | Not applicable |
| | EmS-No.: | F-A, S-B |
| 14.7 | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | Not applicable |

SECTION 15: Regulatory Information**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****National Regulations:**

| | |
|--------------------------------------|-------------------|
| Denmark Product Registration Number: | Not available |
| Danish MAL Code: | Not available |
| Danish MAL Code - Mixture: | Not available |
| Sweden Product Registration Number: | Not available |
| Norway Product Registration Number: | Not available |
| WGK Class: | 2 |
| Directive 2004/42/CE : | 20 g/l (subcat j) |

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information**Text for CLP Hazard Statements shown in Section 3 describing each ingredient:**

| | |
|-------|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H360F | May damage fertility. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

Reasons for revision

Substance and/or Product Properties Changed in Section(s) :

- 01 - Identification
- 14 - Transportation Information

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark;
European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;
European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);
EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

Acronym & Abbreviation Key:

| | |
|--------|---|
| CLP | Classification, Labeling & Packaging Regulation |
| EC | European Commission |
| EU | European Union |
| US | United States |
| CAS | Chemical Abstract Service |
| EINECS | European Inventory of Existing Chemical Substances |
| REACH | Registration, Evaluation, Authorization of Chemicals Regulation |
| GHS | Globally Harmonized System of Classification and Labeling of Chemicals |
| LTEL | Long term exposure limit |
| STEL | Short term exposure limit |
| OEL | Occupational exposure limit |
| ppm | Parts per million |
| mg/m3 | Milligrams per cubic meter |
| TLV | Threshold Limit Value |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| OSHA | Occupational Safety & Health Administration |
| PEL | Permissible Exposure Limits |
| VOC | Volatile organic compounds |
| g/l | Grams per liter |
| mg/kg | Milligrams per kilogram |
| N/A | Not applicable |
| LD50 | Lethal dose at 50% |
| LC50 | Lethal concentration at 50% |
| EC50 | Half maximal effective concentration |
| IC50 | Half maximal inhibitory concentration |
| PBT | Persistent bioaccumulative toxic chemical |
| vPvB | Very persistent and very bioaccumulative |
| EEC | European Economic Community |
| ADR | International Transport of Dangerous Goods by Road |
| RID | International Transport of Dangerous Goods by Rail |
| UN | United Nations |
| IMDG | International Maritime Dangerous Goods Code |
| IATA | International Air Transport Association |
| MARPOL | International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 |
| IBC | International Bulk Container |
| RTI | Respiratory Tract Irritation |
| NE | Narcotic Effects |

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.