

# SAFETY DATA SHEET

# PETTIT



Revision Date 27-Sep-2018  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** PETTIT HRT HYBRID REACTIVE TECHNOLOGY PREMIUM MULTI-SEASON  
ANTIFOULING PAINT – GREEN  
**Product code** 1131900

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Paint  
**Restrictions on use** Read label instructions and SDS

### 1.3 Details of the supplier of the safety data sheet

**Supplier** Kop-Coat, Inc. / Pettit Marine Paint  
Marine Group  
36 Pine Street  
Rockaway, NJ 07866  
1-800-221-4466

### 1.4 Emergency telephone number

**Emergency telephone number** Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Flammable liquids	Category 3

## **2.2 Label elements**

### **Signal Word**

Warning

### **Hazard Statements**

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
Suspected of causing cancer  
May cause respiratory irritation  
Flammable liquid and vapor



### **Precautionary Statements - Prevention**

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  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/Bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

### **Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth  
In case of fire: Use CO2, dry chemical, or foam to extinguish

### **Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## **2.3. Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

## **2.4 Other information**

Not Applicable

**Unknown Acute Toxicity** < 1% of the mixture consists of ingredient(s) of unknown toxicity

### 3. Composition/Information on Ingredients

**Substance**  
**Mixture**

Chemical Name	CAS No.	Weight-%
Cuprous oxide	1317-39-1	40 - 50
Petroleum distillates, light aromatic	64742-95-6	10 - 20
Zinc oxide	1314-13-2	5 - 10
1,2,4-Trimethylbenzene	95-63-6	5 - 10
Titanium dioxide	13463-67-7	1 - 5
C.I. Pigment Green 7	1328-53-6	1 - 5
Cupric Oxide	1317-38-0	1 - 5
CUMENE	98-82-8	< 1
Ethylbenzene	100-41-4	< 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First aid measures

**4.1 Description of first-aid measures**

**General advice** For further assistance, contact your local Poison Control Center.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Call a poison control center or doctor for treatment advice.

**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a poison control center or doctor for treatment advice.

**Inhalation** Move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a poison control center or doctor for treatment advice.

**Ingestion** Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately. If a person vomits when lying on his back, place him in the recovery position.

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

**Symptoms** See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

**4.3 Indication of any immediate medical attention and special treatment needed**

**Notes to physician** There is no specific antidote for effects from overexposure to this material. Treat symptomatically.

### 5. Fire-Fighting Measures

**5.1 Extinguishing media**

**Suitable extinguishing media**  
 Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray or fog. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire.

**Unsuitable Extinguishing Media** Water may be unsuitable for extinguishing fires.

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

### **Special Hazard**

Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products** Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

### **Explosion Data**

**Sensitivity to Mechanical Impact** Not sensitive.

**Sensitivity to Static Discharge** Yes.

## **5.3 Advice for firefighters**

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Thoroughly decontaminate all protective equipment after use. DO NOT extinguish a fire resulting from the flow of flammable liquid until the flow of the liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished.

## **6. Accidental Release Measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Refer to protective measures listed in sections 7 and 8. Avoid exceeding of the given occupational exposure limits (see section 8). Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

### **6.2 Environmental precautions**

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### **6.3 Methods and materials for containment and cleaning up**

#### **Methods for Containment**

Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Ground and bond containers when transferring material. Take precautionary measures against static discharges.

## **7. Handling and storage**

### **7.1 Precautions for safe handling**

#### **Advice on safe handling**

Ensure adequate ventilation. Ground and bond containers when transferring material. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. No smoking.

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep in properly labeled containers. Keep away from food, drink and animal feedingstuffs. Store in accordance with local regulations.

**Materials to Avoid** No materials to be especially mentioned.

**8. Exposure controls/personal protection**

**8.1 Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWA/EV
Cuprous oxide 1317-39-1	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-				
Zinc oxide 1314-13-2	STEL: 10 mg/m <sup>3</sup> respirable fraction TWA: 2 mg/m <sup>3</sup> respirable fraction	TWA: 5 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
C.I. Pigment Green 7 1328-53-6	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-				
Cupric Oxide 1317-38-0	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-				
CUMENE 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> S*	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 246 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 246 mg/m <sup>3</sup>	TWA: 50 ppm
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	TWA: 20 ppm	TWA: 100 ppm TWA: 434 mg/m <sup>3</sup> STEL: 125 ppm STEL: 543 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 434 mg/m <sup>3</sup> STEL: 125 ppm STEL: 543 mg/m <sup>3</sup>	TWA: 20 ppm

**8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

**8.3 Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Safety glasses with side-shields. If splashes are likely to occur, wear:.. Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Solvent-resistant gloves. Nitrile rubber. Neoprene gloves. Impervious butyl rubber gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove and wash contaminated clothing before re-use. Long sleeved clothing. Protective shoes or boots.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures** See section 7 for more information

**9. Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Color</b>	Green
<b>Appearance</b>	No information available		
<b>Odor</b>	Aromatic solvent	<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range	161 °C / 322 °F	
Flash Point	46 °C / 115 °F	
Evaporation rate	< 1	Butyl acetate=1
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.988	
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic	> 22 mm <sup>2</sup> /s	
Viscosity, dynamic		No information available
<b>Explosive properties</b>		No information available
<b>Oxidizing Properties</b>		No information available

**9.2 Other information**

<b>Volatile organic compounds (VOC) content</b>	450 g/L
<b>Density</b>	16.58 lb/gal

**10. Stability and Reactivity**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use

**10.2 Chemical stability**

Stable under recommended storage conditions

**10.3 Possibility of hazardous reactions**

None under normal processing.

**10.4 Conditions to Avoid**

Keep away from heat, sparks and flames.

**10.5 Incompatible Materials**

No materials to be especially mentioned.

**10.6 Hazardous Decomposition Products**

None under normal use conditions. Thermal decomposition can lead to release of irritating gases and vapors.

## 11. Toxicological information

### 11.1 Acute toxicity

#### Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown Acute Toxicity** < 1% of the mixture consists of ingredient(s) of unknown toxicity

<b>Oral LD50</b>	964.00 mg/kg
<b>Dermal LD50</b>	11,005.00 mg/kg
<b>LC50 (Dust/Mist)</b>	57.00 mg/l
<b>LC50 (Vapor)</b>	267.00 mg/l

#### Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cuprous oxide 1317-39-1	470 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	= 5 mg/L ( Rat ) 4 h
Petroleum distillates, light aromatic 64742-95-6	> 5,000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 3400 ppm ( Rat ) 4 h
Zinc oxide 1314-13-2	5000 mg/kg ( Rat )	-	-
1,2,4-Trimethylbenzene 95-63-6	3280 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 18 g/m <sup>3</sup> ( Rat ) 4 h
Titanium dioxide 13463-67-7	10000 mg/kg ( Rat )	-	-
C.I. Pigment Green 7 1328-53-6	> 5000 mg/kg ( Rat )	-	-
CUMENE 98-82-8	1400 mg/kg ( Rat )	= 12300 µL/kg ( Rabbit )	8700 ppm (Rat) 4-h
Ethylbenzene 100-41-4	3500 mg/kg ( Rat )	= 15400 mg/kg ( Rabbit )	= 17.2 mg/L ( Rat ) 4 h

### 11.2 Information on toxicological effects

#### Skin corrosion/irritation

##### Product Information

- No information available

##### Component Information

- No information available

#### Serious eye damage/eye irritation

##### Product Information

- No information available

##### Component Information

- No information available

#### Respiratory or skin sensitization

##### Product Information

- No information available

##### Component Information

- No information available

#### Germ cell mutagenicity

##### Product Information

- No information available

##### Component Information

• No information available

**Carcinogenicity**

Product Information

• The table below indicates whether each agency has listed any ingredient as a carcinogen

Component Information

• Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	
CUMENE 98-82-8	-	Group 2B	Reasonably Anticipated	
Ethylbenzene 100-41-4	-	Group 2B	-	

**Reproductive toxicity**

Product Information

• No information available

Component Information

• No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

• No information available

**Other adverse effects**

Product Information

• No information available

Component Information

• No information available

**Aspiration hazard**

Product Information

• No information available

Component Information

• No information available

**12. Ecological information**

**12.1 Toxicity**

**Ecotoxicity**

No information available

1.44748 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Cuprous oxide 1317-39-1	EC50: 96 h <i>Desmodesmus subspicatus</i> 65 mg/L EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 0.021 - 0.037 mg/L EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 0.055 - 0.076 mg/L static	-	EC50: 48 h <i>Daphnia magna</i> 0.51 mg/L
Petroleum distillates, light aromatic 64742-95-6	-	LC50: 96 h <i>Oncorhynchus mykiss</i> 9.22 mg/L	EC50: 48 h <i>Daphnia magna</i> 6.14 mg/L
Zinc oxide 1314-13-2	LC50: 0.136 mg/l	LC50: 0.169 mg/l	-



1,2,4-Trimethylbenzene 95-63-6	-	LC50: 96 h Pimephales promelas 7.19 - 8.28 mg/L flow-through	EC50: 48 h Daphnia magna 6.14 mg/L
C.I. Pigment Green 7 1328-53-6	-	LC50: 96 h Lepomis macrochirus 752.4 mg/L static	-
CUMENE 98-82-8	EC50: 72 h Pseudokirchneriella subcapitata 2.6 mg/L	LC50: 96 h Pimephales promelas 6.04 - 6.61 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 4.8 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 2.7 mg/L semi-static LC50: 96 h Poecilia reticulata 5.1 mg/L semi-static	EC50: 48 h Daphnia magna 0.6 mg/L EC50: 48 h Daphnia magna 7.9 - 14.1 mg/L Static
Ethylbenzene 100-41-4	EC50: 72 h Pseudokirchneriella subcapitata 4.6 mg/L EC50: 96 h Pseudokirchneriella subcapitata 438 mg/L EC50: 72 h Pseudokirchneriella subcapitata 2.6 - 11.3 mg/L static EC50: 96 h Pseudokirchneriella subcapitata 1.7 - 7.6 mg/L static	LC50: 96 h Oncorhynchus mykiss 11.0 - 18.0 mg/L static LC50: 96 h Oncorhynchus mykiss 4.2 mg/L semi-static LC50: 96 h Pimephales promelas 7.55 - 11 mg/L flow-through LC50: 96 h Lepomis macrochirus 32 mg/L static LC50: 96 h Pimephales promelas 9.1 - 15.6 mg/L static LC50: 96 h Poecilia reticulata 9.6 mg/L static	EC50: 48 h Daphnia magna 1.8 - 2.4 mg/L

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

Chemical Name	log Pow
1,2,4-Trimethylbenzene 95-63-6	3.63
CUMENE 98-82-8	3.55
Ethylbenzene 100-41-4	3.118

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

**13. Disposal Considerations**

**13.1 Waste treatment methods**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. Transport Information**

**Note** DOT Ground - "Non-bulk shipments may be non-regulated per 49CFR 173.150(f)(2)"

**DOT** Not regulated (If shipped in NON BULK packaging by ground transport)

**MEX** no data available

**IMDG**  
**Proper shipping name** UN1263, Paint, 3, III

**IATA**  
**Proper shipping name** UN1263, Paint, 3, III

**15. Regulatory information**

**15.1 International Inventories**

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	-
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL** - Canadian Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals

**15.2 U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %	Weight-%
Cuprous oxide 1317-39-1	1.0	40 - 50
Zinc oxide 1314-13-2	1.0	5 - 10
1,2,4-Trimethylbenzene 95-63-6	1.0	5 - 10
C.I. Pigment Green 7 1328-53-6	1.0	1 - 5
Cupric Oxide 1317-38-0	1.0	1 - 5
Ethylbenzene 100-41-4	0.1	< 1

**15.3 Pesticide Information**

**U.S. EPA Pesticide Information**

**EPA Pesticide Registration Number** 60061-63

**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label**

WARNING. Causes eye irritation. Harmful if absorbed through the skin. May be fatal if swallowed or inhaled.

**15.4 U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Titanium dioxide - 13463-67-7	Carcinogen
CUMENE - 98-82-8	Carcinogen
Ethylbenzene - 100-41-4	Carcinogen
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Cadmium - 7440-43-9	Carcinogen Developmental Male Reproductive
Lead - 7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive
Toluene - 108-88-3	Developmental Female Reproductive

**16. Other information**

<b>NFPA</b>	<b>Health Hazard 2</b>	<b>Flammability 2</b>	<b>Instability 0</b>	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard 2*</b>	<b>Flammability 2</b>	<b>Physical Hazard 0</b>	<b>Personal protection X</b>

**Legend:**

- ACGIH (American Conference of Governmental Industrial Hygienists)
- Ceiling (C)
- DOT (Department of Transportation)
- EPA (Environmental Protection Agency)
- IARC (International Agency for Research on Cancer)
- International Air Transport Association (IATA)
- International Maritime Dangerous Goods (IMDG)
- NIOSH (National Institute for Occupational Safety and Health)
- NTP (National Toxicology Program)
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- PEL (Permissible Exposure Limit)
- Reportable Quantity (RQ)
- Skin designation (S\*)
- STEL (Short Term Exposure Limit)
- TLV® (Threshold Limit Value)
- TWA (time-weighted average)

**Revision Date** 27-Sep-2018

**Revision Note**  
 No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**