



# Safety Data Sheet

according to Regulation (EC) 1907/2006 (REACH)

Revision date: 2019-01-24

Supersedes: 2018-10-31

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier:

**Product trade name:** CURE-RITE\* OBTS Accelerator  
**Company product number:** OBTSFLK  
**REACH registration number:** Not registered  
**Substance name:** 2-(Morpholinothio) benzothiazole  
**Substance identification number:** EC 203-052-4  
**Other means of identification:** Not Available

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

**Uses:** Cure accelerator for rubber.  
**Uses advised against:** None identified

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

**Manufacturer/Supplier:** Emerald Performance Materials, LLC  
1499 SE Tech Center Place, Suite 300  
Vancouver, WA 98683  
United States  
Telephone: +1-360-954-7100  
FAX: +1-360-954-7201  
**For further information about this SDS:** Email: [product.compliance@emeraldmaterials.com](mailto:product.compliance@emeraldmaterials.com)

### 1.4. Emergency telephone number:

ChemTel (24 hours): 1-800-255-3924 (USA); +1-813-248-0585 (outside USA);  
1-300-954-583 (Australia); 000-800-100-4086 (India).

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture:

#### Product classification according to Regulation (EC) 1272/2008 (CLP) as amended:

Skin Irritation, category 2, H315  
Skin Sensitizer, category 1, H317  
Eye Irritation, category 2, H319  
Hazardous to the aquatic environment, Chronic, category 2, H411

### 2.2. Label elements:

#### Product labeling according to Regulation (EC) 1272/2008 (CLP) as amended:

##### Hazard pictogram(s):



##### Signal word:

Warning

##### Hazard statements:

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. 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+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

**Supplemental information:**

No Additional Information

Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Annex III and ECHA Guidance on Labelling and Packaging. Regulations in individual countries/regions may determine which statements are required on the product label. See product label for specifics.

**2.3. Other hazards:****PBT/vPvB criteria:**

Not Available

**Other hazards:**

May form explosible dust-air mixture if dispersed.

See Section 11 for toxicological information.

**SECTION 3: Composition/information on ingredients****3.1. Substance:**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Weight%</u>	<u>Classification</u>	<u>H Statements</u>
0000102-77-2	2-(Morpholinothio) benzothiazole	99-100	Aquatic Chronic 2- Eye Irrit. 2- Skin Irrit. 2- Skin Sens. 1	H315-317-319-411
0000110-91-8	Morpholine	0.1-<1.0	Acute Tox. 3 Dermal- Acute Tox. 3 Inhalation- Acute Tox. 4 Oral- Flam. Liq. 3- Skin Corr. 1A	H226-302-311-314-331
<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Weight%</u>	<u>REACH Registration No.</u>	<u>EC/List Number</u>
0000102-77-2	2-(Morpholinothio) benzothiazole	99-100	Not Available	203-052-4
0000110-91-8	Morpholine	0.1-<1.0	Impurity	203-815-1

See Section 16 for full text of H (Hazard) statements (EC 1272/2008).

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

**SECTION 4: First aid measures****4.1. Description of first aid measures:**

**General:** If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**Eye contact:** Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. If eye irritation persists: Get medical advice/attention.

**Skin contact:** Immediately remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water until no evidence of the chemical remains (at least 15-20 minutes). Launder clothing before reuse. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

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

Irritation. Preexisting sensitization, skin and/or respiratory disorders or diseases may be aggravated. See section 11 for additional information.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media:**

**Suitable:** Use water spray, dry chemical, or foam. Carbon dioxide may be ineffective on larger fires due to a lack of cooling capacity which may result in reignition.

**Unsuitable:** Avoid hose streams or any method which will create dust clouds.

**5.2. Special hazards arising from the substance or mixture:**

**Unusual fire/explosion hazards:** Concentrated dust/air combinations may produce explosive conditions. As with all organic dusts, fine particles suspended in air in critical proportions and in the presence of an ignition source may ignite and/or explode. Dust may be sensitive to ignition by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. As a precaution, implement standard safety measures for handling finely divided organic powders. See Section 7 for suggested measures.

**Hazardous combustion products:** Irritating or toxic substances will be emitted upon burning, combustion or decomposition. See section 10 (10.6 Hazardous decomposition products) for additional information.

**5.3. Advice for firefighters:**

Avoid hose streams or any method which will create dust clouds. Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures:**

See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Avoid raising powdered material due to explosion hazard. Use spark-proof and explosion-proof equipment. If inhalation of dust cannot be avoided, wear an approved particulate respirator. Personal Protective Equipment must be worn.

**6.2. Environmental precautions:**

Do not flush product into public sewer, water systems or surface waters.

**6.3. Methods and material for containment and cleaning up:**

Contain spill. Wear proper personal protective clothing and equipment. Using care to avoid dust generation, vacuum or sweep into a closed container for reuse or disposal. Use approved industrial vacuum cleaner for removal. Avoid causing dust. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

**6.4. References to other sections:**

See Section 8 for recommendations on the use of personal protection and Section 13 for waste disposal.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling:**

As with any chemical product, use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid drinking, tasting, swallowing or ingesting this product. Avoid routine inhalation of dust of any kind. Exercise care when emptying containers, sweeping, mixing or doing other tasks which can create dust. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area. As a precaution to control dust explosion potential, implement the following safety measures: Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). In general, dust of organic materials is a static charge generator which may be ignited by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. Use spark-proof tools and equipment. Bond, ground and properly vent conveyors, dust control devices and other transfer equipment. Prohibit flow of polymer, powder or dust through non-conductive ducts, vacuum hoses or pipes, etc.; only use grounded, electrically conductive transfer lines when pneumatically conveying product. Good housekeeping and controlling of dusts are necessary for safe handling of product. Prevent accumulation of dust (e.g., well-ventilated conditions, promptly vacuuming spills, cleaning overhead horizontal surfaces, etc.).

### 7.2. Conditions for safe storage, including any incompatibilities:

Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use.

### 7.3. Specific end use(s):

No Additional Information

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters:

#### Occupational exposure limits (OEL):

Chemical Name	EU OELV	EU IOELV	ACGIH - TWA/Ceiling	ACGIH - STEL
2-(Morpholinothio) benzothiazole	N/E	N/E	N/E	N/E
Morpholine	N/E	10 ppm TWA, 20 ppm STEL	20 ppm TWA (skin)	N/E
Chemical Name	UK WEL	Ireland OEL		
2-(Morpholinothio) benzothiazole	N/E	N/E		
Morpholine	10 ppm TWA, 20 ppm STEL (skin)	10 ppm TWA, 20 ppm STEL (skin)		

N/E=Not established (no exposure limits established for the listed substances for listed country/region/organization).

Product particle size is typically > 10 microns (inhalable). PNOS: ACGIH has recommended the following exposure limits for Particulates (insoluble or poorly soluble) not otherwise specified (PNOS): 10 mg/m<sup>3</sup> TWA (inhalable particles), 3 mg/m<sup>3</sup> TWA (respirable particles). Belgium: 3 mg/m<sup>3</sup> TWA (alveolar fraction); 10 mg/m<sup>3</sup> TWA (inhalable fraction). Germany MAK Values for dust: 1.5 mg/m<sup>3</sup> MAK (respirable fraction); 4 mg/m<sup>3</sup> MAK (inhalable fraction). Portugal: 10 mg/m<sup>3</sup> TWA (inhalable fraction); 3 mg/m<sup>3</sup> TWA (respirable fraction). Spain: 10 mg/m<sup>3</sup> VLA-ED (inhalable fraction); 3 mg/m<sup>3</sup> VLA-ED (respirable fraction).

### 8.2. Exposure controls:

**Appropriate engineering controls:** Always provide effective general and, when necessary, local exhaust ventilation to draw dust away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Prohibit flow of powder or dust through non-conductive ducts, vacuum hoses, or pipes, etc. Bond, ground, and properly vent conveyors, dust control devices and other transfer equipment.

#### Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Safety glasses or goggles required.

**Hand protection:** Avoid skin contact when mixing or handling the material by wearing impervious and chemical resistant gloves. In case of prolonged immersion or frequently repeated contact, gloves with breakthrough times greater than 480 minutes (protection class 6) are recommended. For brief contact or splash applications, gloves with breakthrough times of 30 minutes or greater are recommended (protection class 2 or greater). Suggested materials for protective gloves: Butyl rubber, Neoprene, Viton. The protective gloves to be used must comply with the specifications of the EC directive

89/686/EEC and the resultant standard EN 374. Suitability and durability of a glove is dependent on usage (e.g. frequency and duration of contact, other chemicals which may be handled, chemical resistance of glove material and dexterity). Always seek advice of the glove supplier as to the most suitable glove material.

**Skin and body protection:** Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment. If inhalation of dust cannot be avoided, wear an approved particulate respirator.

**Further information:** Eyewash fountains and safety showers are recommended in the work area.

**Environmental exposure controls:** See Sections 6 and 12.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties:

<b>Form:</b>	Flake	<b>pH:</b>	Not Available
<b>Appearance:</b>	Tan	<b>Relative density:</b>	1.34
<b>Odour:</b>	Mild amine	<b>Partition coefficient (n-octanol/water):</b>	3.4
<b>Odour threshold:</b>	Not Available	<b>% Volatile by weight:</b>	Not Available
<b>Solubility in water:</b>	Insoluble	<b>VOC:</b>	Not Available
<b>Evaporation rate:</b>	Not Available	<b>Boiling point °C:</b>	385 °C Decomposes
<b>Vapour pressure:</b>	Not Available	<b>Boiling point °F:</b>	725 °F Decomposes
<b>Vapour density:</b>	Not Available	<b>Flash point:</b>	177 °C (351 °F) Cleveland Open Cup
<b>Viscosity:</b>	Not Available	<b>Autoignition temperature:</b>	349 °C (660 °F) (dust cloud)
<b>Melting point/Freezing point:</b>	80-87°C (176-189°F)	<b>Flammability (solid, gas):</b>	May form combustible dust concentrations in air.
<b>Oxidising properties:</b>	Not oxidizing	<b>Flammability or explosive limits:</b>	LFL/LEL: Not Available
<b>Explosive properties:</b>	Not explosive		UFL/UEL: Not Available
<b>Decomposition temperature:</b>	Not Available		

### 9.2. Other information:

Amounts specified are typical and do not represent a specification.

**Dust combustibility data:** The following characteristics apply to powder and are expected to apply to dust from pastilles, flakes or pellets if these forms are reduced to a powder:

- Ignition temperature of dust cloud: 660 °F (349 °C)
- Minimum explosive concentration: 0.15 oz/ft<sup>3</sup> (150 g/m<sup>3</sup>)-
- Minimum ignition energy (dust cloud): 0.25 joules @ 1.5 oz/ft<sup>3</sup> (0.25 joules @ 1500 g/m<sup>3</sup>)
- Maximum rate of pressure rise: 3360 psi/sec @ 1.0 oz/ft<sup>3</sup> (232 bars/sec @ 1000 g/m<sup>3</sup>)
- Maximum pressure of explosion: 74 psig @ 2.0 oz/ft<sup>3</sup> (5.1 bars-gauge @ 2000 g/m<sup>3</sup>)
- Explosion severity: 1.3 (strong)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity:

Reaction with nitrites, nitrates and/or other nitrosating agents may lead to the formation of nitrosamines.

### 10.2. Chemical stability:

This product is stable. Prolonged storage above 43 °C (109 °F) will initiate chemical changes resulting in loss of accelerator functionality.

### 10.3. Possibility of hazardous reactions:

Hazardous polymerization will not occur.

**10.4. Conditions to avoid:**

Avoid static discharge. Avoid exposure to moisture, ignition sources and elevated temperatures. Avoid dust formation.

**10.5. Incompatible materials:**

Avoid contact with strong acids. Avoid contact with strong oxidizing agents and reducing agents. Avoid contact with nitrosating agents. Depending on the amount and specific materials involved, contact can result in intense heat, boiling, flame development, explosion or toxic gas generation.

**10.6. Hazardous decomposition products:**

May liberate morpholine vapor when heated above 266°F (130°C). Carbon dioxide, carbon monoxide, hydrocarbons, oxides of nitrogen, morpholine, and oxides of sulfur.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects:****Information on likely routes of exposure:**

**General:** Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

**Eyes:** Causes serious eye irritation.

**Skin:** May cause allergic skin reaction. Causes skin irritation.

**Inhalation:** Dust inhalation may cause respiratory irritation.

**Ingestion:** Ingestion may cause irritation.

**Acute toxicity information:** Not classified (based on available data, the classification criteria are not met).

<b>Chemical Name</b>	<b>Inhalation LC50</b>	<b>Species</b>	<b>Oral LD50</b>	<b>Species</b>	<b>Dermal LD50</b>	<b>Species</b>
2-(Morpholiniothio) benzothiazole	>151 mg/L (1 hour)	Rat/ adult	>7940 mg/kg (similar materials)	Rat/ adult	>7940 mg/kg (similar materials)	Rabbit/ adult
Morpholine	8 mg/L (vapor)	Rat/ adult	1910 mg/kg	Rat/ adult	500 mg/kg	Rabbit/ adult

**Skin corrosion/irritation:** Causes skin irritation - Category 2.

<b>Chemical Name</b>	<b>Skin irritation</b>	<b>Species</b>
2-(Morpholiniothio) benzothiazole	Irritant	Human
Morpholine	Corrosive	Rabbit/ adult

**Serious eye damage/irritation:** Causes serious eye irritation - Category 2.

<b>Chemical Name</b>	<b>Eye irritation</b>	<b>Species</b>
2-(Morpholiniothio) benzothiazole	Moderate irritant	Rabbit/ adult
Morpholine	Severe irritant	Rabbit/ adult

**Respiratory or skin sensitization:** Skin sensitization - Category 1.

<b>Chemical Name</b>	<b>Skin sensitisation</b>	<b>Species</b>
2-(Morpholiniothio) benzothiazole	Sensitizer	Guinea pig and Human Patch
Morpholine	Non-sensitizer	Guinea Pig/ adult

**Carcinogenicity:** Not classified (based on available data, the classification criteria are not met). N-OXYDIETHYLENE-2-BENZOTHIAZOLYLSULFENAMIDE (OBTS): Groups of rats were administered OBTS in their diet so that doses of 0, 5, 50 and 400 mg/kg/day were achieved over a 113 week period. The pattern of non-neoplastic pathology was consistent with that expected in aging rats of the strain used. There was no difference between the control and high dose groups in overall incidence of tumor types to indicate an oncogenic effect.

**Germ cell mutagenicity:** Not classified (based on available data, the classification criteria are not met). N-OXYDIETHYLENE-2-BENZOTHIAZOLYLSULFENAMIDE (OBTS): No mutagenic activity was observed in the Ames test CHO/HGPRT, CHO Sister Chromated Exchange, E. coli WP2 uvrA, or CHO chromosome aberration assays. No mutagenic response was observed in vivo using a dominant lethal test. Mutagenic responses were observed in the mouse lymphoma L5178YTK+ assay, E. coli pol A+/A- (with preincubation), and cell transformation BALB/3T3 assays. Equivocal results were obtained in Drosophila.

**Reproductive toxicity:** Not classified (based on available data, the classification criteria are not met). N-OXYDIETHYLENE-2-

BENZOTHIAZOLYLSULFENAMIDE (OBTS): Although some investigators have reported embryotoxicity in rodents which were force-fed high levels of OBTS, other investigators have not found any evidence of teratogenic effects associated with this substance. However, OBTS has been reported to cause malformations in chicken embryos.

**Specific target organ toxicity (STOT) - single exposure:** Not classified (based on available data, the classification criteria are not met).

**Specific target organ toxicity (STOT) - repeated exposure:** Not classified (based on available data, the classification criteria are not met). N-OXYDIETHYLENE-2-BENZOTHIAZOLYLSULFENAMIDE (OBTS): Groups of rats were administered OBTS in their diet so that doses of 0, 5, 50 and 400 mg/kg/day were achieved over a 113 week period. No evidence was observed of any treatment-related effect on hematology, clinical chemistry, urine analysis, or on the incidence and causes of morbidity or mortality. The only compound related effects were reduced weight gains which were associated with slight reductions in food consumption and a slight increase in liver and kidney weights. Changes in the weights of other organs were considered to be secondary effects reflecting interference in the normal growth pattern.

**Aspiration hazard:** Not classified (technical impossibility to obtain the data).

**Other toxicity information:** No additional information available.

## SECTION 12: Ecological information

### 12.1. Toxicity:

<u>Chemical Name</u>	<u>Species</u>	<u>Acute</u>	<u>Acute</u>	<u>Chronic</u>
2-(Morpholinothio) benzothiazole	Fish	LC50 4.4 mg/L (96 hours)	LC50 1.3 mg/L(96 hours)	N/E
2-(Morpholinothio) benzothiazole	Invertebrates	EC50 4 mg/L (48 hours)	N/E	N/E
2-(Morpholinothio) benzothiazole	Algae	N/E	N/E	N/E
Morpholine	Fish	LC50 180-380 mg/L (96 hours)	LC50 179 mg/L(96 hours)	N/E
Morpholine	Invertebrates	EC50 45 mg/L (48 hours)	N/E	EC10 5-8.1 mg/L (21 days)
Morpholine	Algae	EC50 28 mg/L (96 hours)	N/E	NOEC 10 mg/L(96 hours)

### 12.2. Persistence and degradability:

Not readily biodegradable but does rapidly biodegrade via hydrolysis.

<u>Chemical Name</u>	<u>Biodegradation</u>
2-(Morpholinothio) benzothiazole	Not readily biodegradable
Morpholine	Readily biodegradable (OECD 301E)

### 12.3. Bioaccumulative potential:

<u>Chemical Name</u>	<u>Bioconcentration Factor (BCF)</u>	<u>Log Kow</u>
2-(Morpholinothio) benzothiazole	N/E	3.4
Morpholine	<2.8 (OECD 305C)	-2.55

### 12.4. Mobility in soil:

<u>Chemical Name</u>	<u>Mobility in soil (Koc/Kow)</u>
2-(Morpholinothio) benzothiazole	N/E
Morpholine	7.356

### 12.5. Results of PBT and vPvB assessment:

Not Available

### 12.6. Other adverse effects:

No additional information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods:

Dispose of unused contents (incineration or landfill) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

See Section 8 for recommendations on the use of personal protective equipment.

## SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.

**14.1. UN number:** UN3077

**14.2. UN proper shipping name:**

Environmentally hazardous substance, solid, n.o.s. (N-(Oxydiethylene) benzothiazole- 2-sulfenamide)

**14.3. Transport hazard class(es):**

**U.S. DOT hazard class:** N/A

**Canada TDG hazard class:** N/A

**Europe ADR/RID hazard class:** 9

**IMDG Code (ocean) hazard class:** 9

**ICAO/IATA (air) hazard class:** 9

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

**14.4. Packing group:** III

**14.5. Environmental hazards:**

**Marine pollutant:** Marine Pollutant (IMDG code 2.9.3).

**Hazardous substance (USA):** A shipment in a single package greater than 20,000 lbs. may exceed the reportable quantity (RQ) for one or more components.

**14.6. Special precautions for user:**

Not Applicable

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code:**

**Chemical Name**

Morpholine

**Category**

Category Y

**Notes:** For surface shipments within the United States: Not regulated.

## SECTION 15: Regulatory information

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

**Europe REACH (EC) 1907/2006:** Not all applicable components are registered. Please contact your sales representative for further information regarding REACH compliance. REACH is only relevant to substances either manufactured or imported into the EU. REACH information regarding this product is provided for informational purposes only. Each Legal Entity may have differing REACH obligations, depending on their place in the supply chain. For material manufactured outside of the EU, the importer of record must understand and meet their specific obligations under the regulation.

**EU Authorizations and/or restrictions on use:** Not Applicable

**Other EU information:** No Additional Information

**National regulations:** No Additional Information

**Chemical inventories:**

**Regulation**

**Status**

Australian Inventory of Chemical Substances (AICS):

Y

Canadian Domestic Substances List (DSL):

Y

Canadian Non-Domestic Substances List (NDSL):

N

China Inventory of Existing Chemical Substances (IECSC):

Y

European EC Inventory (EINECS, ELINCS, NLP):

Y

Japan Existing and New Chemical Substances (ENCS):

Y

Japan Industrial Safety and Health Law (ISHL):

Y

Korean Existing and Evaluated Chemical Substances (KECL):

Y

New Zealand Inventory of Chemicals (NZIoC):

Y

Philippines Inventory of Chemicals and Chemical Substances (PICCS):

Y



**Regulation**

Taiwan Inventory of Existing Chemicals:  
U.S. Toxic Substances Control Act (TSCA):

**Status**

Y  
Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory; 2) no information is available; or 3) the component has not been reviewed. A "Y" for New Zealand may mean that a qualified group standard may exist for the components in this product.

**15.2. Chemical safety assessment:**

Not Applicable

**SECTION 16: Other information**

**Hazard (H) Statements in the Composition section (Section 3):**

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H411	Toxic to aquatic life with long lasting effects.

**Reason for revision:** Changes in Section(s): 3

**Evaluation method for classification of mixtures:** Not Applicable (substance)

**Legend:**

\* : Trademark owned by Emerald Performance Materials, LLC.  
ACGIH: American Conference of Governmental Industrial Hygienists  
EU OELV: European Union Occupational Exposure Limit Value  
EU IOELV: European Union Indicative Occupational Exposure Limit Value  
N/A: Not Applicable  
N/E: None Established  
STEL: Short Term Exposure Limit  
TWA: Time Weighted Average (exposure for 8-hour workday)

**Users Responsibility/Disclaimer of Liability:**

The information set forth herein is based on our current knowledge, and is intended to describe the product solely with respect to health, safety and the environment. As such, it must not be interpreted as a guarantee of any specific property of the product. As a result, the customer shall be solely responsible for deciding whether said information is suitable and beneficial.

Safety Data Sheet Preparer:  
Product Compliance Department  
Emerald Performance Materials, LLC  
1499 SE Tech Center Place, Suite 300  
Vancouver, WA 98683  
United States