

SAFETY DATA SHEET

Section 1. Product and company identification

Product name	BUTYL EIGHT®	<u>In case of emergency</u>
Code	07708	1-203-853-1400
Supplier/Manufacturer	Vanderbilt Chemicals, LLC 30 Winfield Street Norwalk, CT 06855	Chemtrec: 1-800-424-9300 Outside US: +1-703-527-3887
Chemical name	A dithiocarbamate in 2-propyloxy ethanol.	
Synonym	A dithiocarbamate in propyl cellosolve.	
Material uses	Accelerator.	
Product type	Liquid.	

Section 2. Hazards identification

OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	FLAMMABLE LIQUIDS - Category 3 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms



Signal word

Warning

Hazard statements

Flammable liquid and vapor.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements

Prevention

Wear protective gloves. Wear protective clothing: Recommended: lab coat. Wear eye or face protection: Recommended: splash goggles. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 or attention.

Storage

Store in a well-ventilated place. Keep cool.

Section 2. Hazards identification

Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	None known.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Ingredient name	CAS number	% by weight
2-(propyloxy)ethanol	2807-30-9	<45
activated dithiocarbamate	-	33 - 38
2-mercaptobenzothiazole	149-30-4	10 - 20

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	Causes serious eye irritation.
Inhalation	No known significant effects or critical hazards.
Skin contact	May cause an allergic skin reaction.
Ingestion	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Section 4. First aid measures

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation redness
Ingestion	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	No specific treatment.
Protection of first-aiders	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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	Do not use water jet.

Specific hazards arising from the chemical

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark

Carbon disulfide will be released in acid media, or in buffered systems below pH 8. In a closed system, complete decomposition could produce carbon disulfide concentrations at or above the lower explosion limit.

Section 5. Fire-fighting measures

Remark(s)	Hot organic chemical vapor or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "autoignition" or "ignition" temperatures. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes.
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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
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Section 7. Handling and storage

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: splash goggles

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Section 8. Exposure controls/personal protection

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: lab coat

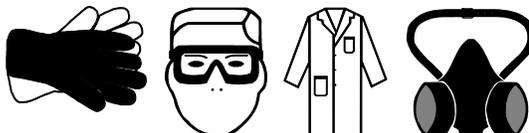
Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Vapor and dust respirator.

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Brownish-red.
Odor	Not available.
Odor threshold	Not available.
pH	7.8 to 8.3
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: 34°C (93.2°F) [ASTM D6450]
Burning time	Not applicable.
Burning rate	Not applicable.
Evaporation rate	<1 (butyl acetate = 1)
Flammability (solid, gas)	Carbon disulfide will be released in acid media, or in buffered systems below pH 8. In a closed system, complete decomposition could produce carbon disulfide concentrations at or above the lower explosion limit.
Lower and upper explosive (flammable) limits	Lower: 1.26% Upper: 15.8%
Vapor pressure	0.18 kPa (1.33 mm Hg)
Vapor density	3.6 [Air = 1]
Density	0.98 to 1.02 g/cm ³ [25°C (77°F)]
Relative density	0.98 to 1.02
Solubility	Easily soluble in the following materials: acetone. Soluble in the following materials: cold water.
Solubility in water	Not available.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature SADT	Not available.

Section 9. Physical and chemical properties

Viscosity Not available.

Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-(propyloxy)ethanol	LC50 Inhalation Gas.	Rat	>2132 ppm	6 hours
	LD50 Dermal	Rabbit	1337 mg/kg	-
	LD50 Oral	Rat	3089 mg/kg	-
2-mercaptobenzothiazole	LC50 Inhalation Dusts and mists	Rat	>1270 mg/l	4 hours
	LD50 Dermal	Rabbit	>7940 mg/kg	-
	LD50 Oral	Rat	3800 mg/kg	-

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin 2-(propyloxy)ethanol: Non-irritating to the skin. (Rabbit)
2-mercaptobenzothiazole: Non-irritating to the skin. (Rabbit)

Eyes 2-(propyloxy)ethanol: Causes serious eye irritation. (Rabbit)
2-mercaptobenzothiazole: Non-irritating to the eyes. (Rabbit)

Sensitization

Product/ingredient name	Route of exposure	Species	Result
2-(propyloxy)ethanol	skin	Guinea pig	Not sensitizing
2-mercaptobenzothiazole	skin	Guinea pig	Sensitizing

Section 11. Toxicological information

Mutagenicity

Product/ingredient name	Test	Experiment	Result
2-(propyloxy)ethanol	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
2-mercaptobenzothiazole	-	Experiment: In vitro Subject: Bacteria	Negative
	-	Experiment: In vivo Subject: Mammalian-Animal	Negative

Carcinogenicity

Not available.

Product/ingredient name	OSHA	IARC	NTP
2-mercaptobenzothiazole	-	2A	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact

Causes serious eye irritation.

Inhalation

No known significant effects or critical hazards.

Skin contact

May cause an allergic skin reaction.

Ingestion

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation

No specific data.

Section 11. Toxicological information

Skin contact	Adverse symptoms may include the following: irritation redness
Ingestion	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	Not available.
Potential delayed effects	Not available.

Long term exposure

Potential immediate effects	Not available.
Potential delayed effects	Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
2-(propyloxy)ethanol	Chronic NOAEL Oral	Rat	<195 mg/kg	-
2-mercaptobenzothiazole	Chronic LOAEL Oral	Rat	2500 mg/kg	-

General	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2-(propyloxy)ethanol	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >5000 mg/l	Daphnia	48 hours
	Acute IC50 >1000 mg/l	Micro-organism	16 hours
	Acute LC50 >5000 mg/l	Fish	96 hours
	Acute NOEC 100 mg/l	Algae	72 hours
2-mercaptobenzothiazole	Acute EC50 0.5 mg/l	Algae	72 hours
	Acute EC50 3301 mg/l	Micro-organism	3 hours
	Acute LC50 0.71 mg/l	Daphnia	48 hours
	Acute LC50 0.73 mg/l	Fish	96 hours
	Acute NOEC 0.066 mg/l	Algae	72 hours
	Acute NOEC 0.08 mg/l	Daphnia	21 days

Section 12. Ecological information

	Acute NOEC 0.041 mg/l	Fish	96 hours
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Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2-(propyloxy)ethanol	-	100 % - Readily - 20 days	-	-
2-mercaptobenzothiazole	OECD 301C	2.5 % - Not readily - 14 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-(propyloxy)ethanol	-	-	Readily
2-mercaptobenzothiazole	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2-(propyloxy)ethanol	0.673	-	low
2-mercaptobenzothiazole	2.42	18.35	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification

D001

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

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1993	FLAMMABLE LIQUIDS, N.O.S. (2-(propyloxy)ethanol, 2-mercaptobenzothiazole)	3	III	 	Remarks Marine pollutant
TDG Classification	UN1993	FLAMMABLE LIQUIDS, N.O.S. (2-(propyloxy)ethanol, 2-mercaptobenzothiazole)	3	III	 	Remarks Marine pollutant
ADR/RID Class	UN1993	FLAMMABLE LIQUIDS, N.O.S. (2-(propyloxy)ethanol, 2-mercaptobenzothiazole)	3	III	 	Remarks Marine pollutant
IMDG Class	UN1993	FLAMMABLE LIQUIDS, N.O.S. (2-(propyloxy)ethanol, 2-mercaptobenzothiazole)	3	III	 	Remarks Marine pollutant
IATA-DGR Class	UN1993	FLAMMABLE LIQUIDS, N.O.S. (2-(propyloxy)ethanol, 2-mercaptobenzothiazole)	3	III	 	-

PG* : Packing group

Section 15. Regulatory information

[United States Inventory \(TSCA 8b\)](#) All components are active or exempted.

[U.S. Federal regulations](#)

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

CERCLA: Hazardous substances.: 2-(propyloxy)ethanol: No RQ is being assigned to the generic or broad class.;

Clean Air Act Section 112 Listed
(b) Hazardous Air Pollutants (HAPs)

Section 15. Regulatory information

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

Not applicable.

SARA 311/312

Classification

FLAMMABLE LIQUIDS - Category 3
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1

Composition/information on ingredients

Name	%	Classification
2-(propyloxy)ethanol	<45	ACUTE TOXICITY (dermal) - Category 4 EYE IRRITATION - Category 2A
2-mercaptobenzothiazole	10 - 20	SKIN SENSITIZATION - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	2-(propyloxy)ethanol	2807-30-9	<45
	2-mercaptobenzothiazole	149-30-4	10 - 20
Supplier notification	2-(propyloxy)ethanol	2807-30-9	<45
	2-mercaptobenzothiazole	149-30-4	10 - 20

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

None of the components are listed.

New York

None of the components are listed.

New Jersey

The following components are listed: GLYCOL ETHERS;
2-MERCAPTOBENZOTHIAZOLE

Pennsylvania

None of the components are listed.

California Prop. 65



WARNING: This product can expose you to 2-Mercaptobenzothiazole, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name

No significant risk level

Maximum acceptable dosage level

2-Mercaptobenzothiazole	-	-
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International regulations

Australia Inventory (AIC)

All components are listed or exempted.

Canada Inventory

All components are listed or exempted.

China Inventory (IECSC)

All components are listed or exempted.

Japan Inventory (CSCL)

All components are listed or exempted.

Korea inventory (KECI)

All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC)

All components are listed or exempted.

Section 15. Regulatory information

Philippines Inventory (PICCS)

All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI)

All components are listed or exempted.

Section 16. Other information

[Hazardous Material Identification System \(U.S.A.\)](#)

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

[National Fire Protection Association \(U.S.A.\)](#)



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History

Date of printing	5/4/2023
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Date of previous issue	11/29/2017
Version	3

Key to abbreviations

ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References

Not available.

Section 16. Other information

Information contact **Vanderbilt Global Services, LLC**
Corporate Risk Management
1-203-295-2143

Visit www.vanderbiltchemicals.com for more information.

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