

Material Name: Barrithane VP Product #: 331445

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

Barrithane VP

Synonyms

Silane Terminated Polyether

Product Use

AVB coating

Restrictions on Use

None known

Details of the supplier of the safety data sheet

Carlisle Coatings and Waterproofing Incorporated

900 Hensley Lane

Wylie, TX 75098

www.carlisle-ccw.com

MSDS Assistance - 972.442.6545

Technical Assistance - 888.229.2199

Customer Service - 888.229.0199

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Carcinogenicity - Category 1A

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (kidneys, respiratory system, immune system, lungs)

GHS Label Elements

Symbol(s)



Signal Word

Danger

Hazard Statement(s)

May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

May ignite if exposed to high temperatures or direct flame.

Precautionary Statement(s)

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.

Do not breathe dust/fume/gas/mist/vapors/spray.

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Wash thoroughly after handling.

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

Response

IF exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
13674-84-5	Phosphate plasitcizer	25-35
1317-65-3	Limestone	25-35
NA	Other components or impurities which are not considered hazardous and/or are not associated with an OEL and will not influence the classification of the product	25-35
471-34-1	Carbonic acid, calcium salt (1:1)	7-8
19186-97-1	Bromoneopental phosphate	1-5
64741-65-7	Odorless Mineral Spirits	3-7
14808-60-7	Quartz	0.5-1.75
2768-02-7	Silane, ethenyltrimethoxy-	1-2
57-11-4	Stearic acid	1-2
13463-67-7	Titanium dioxide	0.5-2.0
22673-19-4	Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	0.1-0.3
1333-86-4	Carbon black	0.05-0.15
1305-78-8	Calcium oxide	0.0745

Section 4 - FIRST AID MEASURES

Description of Necessary Measures

IF exposed or concerned: Get medical advice/attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing. Get medical attention, if need.

Skin

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Wash exposed skin with soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Eyes

Flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

Do NOT induce vomiting. If swallowed, get medical attention.

Most Important Symptoms/Effects

Acute

No information on significant adverse effects.

Delayed

May cause cancer. Causes damage to organs through prolonged or repeated exposure: kidneys, respiratory system, immune system, lungs.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use dry chemical, carbon dioxide, alcohol-resistant foam or water spray.

Unsuitable Extinguishing Media

None reported.

Special Hazards Arising from the Chemical

Slight fire hazard. This product is combustible and can be ignited when exposed to its flashpoint. Closed containers may develop pressure and rupture in event of fire.

Hazardous Combustion Products

Carbon dioxide, carbon monoxide, hydrochloric acid

Fire Fighting Measures

Remove product from area of fire. Stay upwind and keep out of low areas.

Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Absorb with earth, sand or other non-combustible material and transfer to container. Dike for later disposal. Dispose in accordance with all applicable regulations.

Environmental Precautions

Avoid release to the environment.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

This product contains crystalline silica, which is a known carcinogen: Do not grind or sand. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective

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gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. KEEP OUT OF REACH OF CHILDREN.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Store in a well-ventilated place. When not in use, keep containers tightly closed. Do not cut, puncture, or weld on or near this container. Keep away from incompatible materials.

Store in a cool, dry locations, away from sunlight, sources of intense heat, or where freezing is possible.

Incompatible Materials

strong acids, strong oxidizing agents

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Limestone	1317-65-3	
NIOSH:	10 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable dust	
OSHA (US):	15 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable fraction	
Mexico:	10 mg/m3 TWA VLE-PPT	
	20 mg/m3 STEL [PPT-CT]	
Carbonic acid, calcium salt (1:1)	471-34-1	
NIOSH:	10 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable dust	
OSHA (US):	15 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable fraction (related to Limestone)	
Mexico:	10 mg/m3 TWA VLE-PPT (related to Limestone)	
	20 mg/m3 STEL [PPT-CT] (related to Limestone)	
Quartz	14808-60-7	
ACGIH:	0.025 mg/m3 TWA respirable particulate matter	
NIOSH:	0.05 mg/m3 TWA respirable dust	
	50 mg/m3 IDLH respirable dust	
OSHA (US):	50 μg/m3 TWA	
	((250)/(%SiO2 + 5) mppcf TWA) respirable fraction ; ((10)/(%SiO2 + 2) mg/m3 TWA) respirable fraction	
Mexico:	0.1 mg/m3 TWA VLE-PPT respirable fraction	
Stearic acid	57-11-4	

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	10 mg/m3 TWA inhalable particulate matter; 3 mg/m3 TWA
ACGIH:	respirable particulate matter
Titanium dioxide	13463-67-7
ACGIH:	10 mg/m3 TWA
NIOSH:	5000 mg/m3 IDLH
OSHA (US):	15 mg/m3 TWA total dust
Mexico:	10 mg/m3 TWA VLE-PPT as Ti
	20 mg/m3 STEL [PPT-CT] as Ti
Tin, dibutylbis(2,4-pentanedionato- O,O')-, (OC-6-11)-	22673-19-4
ACGIH:	0.1 mg/m3 TWA as Sn (related to Tin organic compounds)
	0.2 mg/m3 STEL as Sn (related to Tin organic compounds)
	Skin - potential significant contribution to overall exposure by the cutaneous route (related to Tin organic compounds)
NIOSH:	0.1 mg/m3 TWA (except Cyhexatin) as Sn (related to Tin organic compounds)
	Potential for dermal absorption (related to Tin organic compounds)
	25 mg/m3 IDLH (except Cyhexatin) as Sn (related to Tin organic compounds)
OSHA (US):	0.1 mg/m3 TWA as Sn (related to Tin organic compounds)
Mexico:	0.1 mg/m3 TWA VLE-PPT as Sn (related to Tin organic compounds)
	0.2 mg/m3 STEL [PPT-CT] as Sn (related to Tin organic compounds)
	Skin - potential for cutaneous absorption (related to Tin organic compounds)
Carbon black	1333-86-4
ACGIH:	3 mg/m3 TWA inhalable particulate matter
NIOSH:	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons) as PAH
	1750 mg/m3 IDLH

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OSHA (US):	3.5 mg/m3 TWA	
Mexico:	3.5 mg/m3 TWA VLE-PPT	
	mg/m3 STEL [PPT-CT]	
Calcium oxide	1305-78-8	
ACGIH:	2 mg/m3 TWA	
NIOSH:	2 mg/m3 TWA	
	25 mg/m3 IDLH	
OSHA (US):	5 mg/m3 TWA	
Mexico:	2 mg/m3 TWA VLE-PPT	
Odorless Mineral Spirits	64741-65-7	
ACGIH:	No data	
NIOSH:	No data	
OSHA (US):	2000 mg/m3 TWA	
Mexico:	No data	

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate work clothing.

Respiratory Protection

Respirators depend on exposure level. SCBA with full face piece recommended during change outs and available in case of emergency.

Glove Recommendations

Wear protective gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark Grey paste	Physical State	liquid
Odor	characteristic	Color	Dark grey

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Odor Threshold	Not available	рН	Not available	
Melting Point	Not available	Boiling Poin	Not available	
Boiling Point Range	Not available	Freezing point	Not available	
Evaporation Rate	Not available	Flammability (solid, gas)	Not available	
Autoignition Temperature	Not available	Flash Point	110°F	
Lower Explosive Limit	Not available	Decomposition temperature	Not available	
Upper Explosive Limit	Not available	Vapor Pressure	Not available	
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available	
Water Solubility	Not available	Partition coefficient: n-octanol/water	Not available	
Viscosity	Slightly thick liquid	Kinematic viscosity	Not available	
Solubility (Other)	Not available	Density	1.35 - 1.45	
voc	166 g/L	Molecular Weight	Not available	

Other Information

No additional information available.

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal conditions of use.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

Incompatible Materials

Strong acids, strong oxidizing agents

Hazardous decomposition products

Carbon dioxide, Carbon monoxide, hydrochloric acid

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

No information on significant adverse effects.

Skin Contact

No information on significant adverse effects.

Eye Contact

No information on significant adverse effects.

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Ingestion

No information on significant adverse effects.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Phosphate Plasticizer (13674-84-5)

Oral LD50 Rat 630-2000 mg/kg

Dermal LD50 Rat >5000 mg/kg

Inhalation Rat >7 mg

Carbonic acid, calcium salt (1:1) (471-34-1)

Oral LD50 Rat 6450 mg/kg

Silane, ethenyltrimethoxy- (2768-02-7)

Oral LD50 Rat 7340 µL/kg

Stearic acid (57-11-4)

Oral LD50 Rat 4600 mg/kg

Titanium dioxide (13463-67-7)

Oral LD50 Rat >10000 mg/kg

Carbon black (1333-86-4)

Oral LD50 Rat >15400 mg/kg

Calcium oxide (1305-78-8)

Oral LD50 Rat 500 mg/kg

Odorless mineral spirits (64741-65-7)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >5000 mg/kg

Product Toxicity Data

Acute Toxicity Estimate

Oral	> 2000 mg/kg
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Immediate Effects

No information on significant adverse effects.

Delayed Effects

May cause cancer. Causes damage to organs through prolonged or repeated exposure: kidneys, respiratory system, immune system, lungs.

Irritation/Corrosivity Data

No information available for the product.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

No information available for the product.

Component Carcinogenicity

Quartz	14808-60-7
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))

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NTP:	Known Human Carcinogen
DFG:	Category 1 (causes cancer in man ;alveola fraction)
OSHA:	Present (respirable size)
NIOSH:	potential occupational carcinogen
Titanium dioxide	13463-67-7
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 93 [2010]; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3A (could be carcinogenic for man; inhalable fraction with the exception of ultra-small particles)
OSHA:	Present
NIOSH:	potential occupational carcinogen
Tin, dibutylbis(2,4-pentanedionato-	
O,O')-, (OC-6-11)-	22673-19-4
	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic compounds)
O,O')-, (OC-6-11)-	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic
O,O')-, (OC-6-11)- ACGIH:	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic compounds)
O,O')-, (OC-6-11)- ACGIH: DFG:	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic compounds) Category 4 (no significant contribution to human cancer)
O,O')-, (OC-6-11)- ACGIH: DFG: Carbon black	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic compounds) Category 4 (no significant contribution to human cancer) 1333-86-4 A3 - Confirmed Animal Carcinogen with Unknown Relevance to
O,O')-, (OC-6-11)- ACGIH: DFG: Carbon black ACGIH:	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic compounds) Category 4 (no significant contribution to human cancer) 1333-86-4 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans Monograph 93 [2010] ; Monograph 65 [1996] (Group 2B (possibly
O,O')-, (OC-6-11)- ACGIH: DFG: Carbon black ACGIH: IARC:	A4 - Not Classifiable as a Human Carcinogen (related to Tin organic compounds) Category 4 (no significant contribution to human cancer) 1333-86-4 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans Monograph 93 [2010] ; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic Data

No data available

Reproductive Toxicity

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

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No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

Kidneys, respiratory system, immune system, lungs

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

No data available.

Additional Data

No additional information available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Avoid release to the environment. Harmful to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

Phosphate Plasticizer	13674-84-5	
Fish:	LC50 96h 56.2 mg/L ; EC50 48h Daphnia magna 131 mg/L ; EC50 72h Freshwater algae 82 mg/L	
Calcium oxide	1305-78-8	
Fish:	LC50 96 h Cyprinus carpio 1070 mg/L [static]	

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Other Toxicity

No additional information available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

UN/NA #: Not regulated

IATA Information:

UN#: Not regulated

IMDG Information:

UN#: Not regulated

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TDG Information:

UN#: Not regulated

International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Titanium dioxide	13463-67-7
IBC Code:	Category Z (slurry)

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C) 2017 reporting categories

Carcinogenicity; Specific Target Organ Toxicity

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Limestone	1317-65-3	No	Yes	Yes	Yes	Yes
Carbonic acid, calcium salt (1:1)	471-34-1	No	Yes	Yes	Yes	Yes
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes
Titanium dioxide	13463-67-7	No	Yes	Yes	Yes	Yes
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	22673-19-4	Yes	No	Yes	No	No
Carbon black	1333-86-4	Yes	Yes	Yes	Yes	Yes
Calcium oxide	1305-78-8	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Phosphate Plasticizer	13674-84-5
Titanium dioxide	13463-67-7
Care:	carcinogen , 9/2/2011 (airborne, unbound particles of respirable size)
Carbon black	1333-86-4

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Carc:	carcinogen , 2/21/2003 (airborne, unbound particles of respirable size)
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Canada Regulations

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Quartz	14808-60-7
	1 %
Stearic acid	57-11-4
	1 %
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	22673-19-4
	1 % (related to Tin compounds)
Carbon black	1333-86-4
	1 %
Calcium oxide	1305-78-8
	1 %

Component Analysis - Inventory Phosphate plasticizer (13674-84-5)

US	CA	EU	AU	РН	-	JP - ISHL	KR KECI - Annex 1	KECI -	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

Limestone (1317-65-3)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KECI -		KR - REACH CCA	CN	NZ	MX	TW
Yes	NSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Carbonic acid, calcium salt (1:1) (471-34-1)

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US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KECI -		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Quartz (14808-60-7)

US	CA	EU	AU	РН	-	JP - ISHL			KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Silane, ethenyltrimethoxy- (2768-02-7)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes

Stearic acid (57-11-4)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Titanium dioxide (13463-67-7)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)- (22673-19-4)

US	CA	EU	AU	РН	-	JP - ISHL		KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes

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Carbon black (1333-86-4)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Calcium oxide (1305-78-8)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Odorless Mineral Spirits (64741-65-7)

US	CA	EU	AU	РН	_	JP - ISHL		KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No

Section 16 - OTHER INFORMATION

Summary of Changes

New SDS: March 16, 2018

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU -Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG -Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN -European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA -Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL -Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIstsTM -ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL -

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Maximum Exposure Limits; MX – Mexico; NDSL – Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

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