Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
Manus Bond 50A-HV
Product Use
sealant
Restrictions on Use
None known
Details of the supplier of the safety data sheet
Manus Products, Inc.
866 Industrial Blvd. West
Waconia, MN 55387
Phone: (952) 442-3323
Emergency Phone #: (800) 424-9300

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
Acute Toxicity - Inhalation - Vapor - Category 4
Germ Cell Mutagenicity - Category 2
Carcinogenicity - Category 2
Reproductive Toxicity - Category 1B
Specific Target Organ Toxicity - Single Exposure - Category 1 (respiratory system)
Specific Target Organ Toxicity - Repeated Exposure - Category 1 (nervous system , upper respiratory system , respiratory system)
Specific Target Organ Toxicity - Repeated Exposure - Category 2 (brain , Nervous System)
GHS Label Elements
Symbol(s)

Signal Word
Danger
Hazard Statement(s)
Harmful if inhaled.
Suspected of causing genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.
Precautionary Statement(s)
Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

Response

If exposed: Call a POISON CENTER or doctor/physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.
Specific treatment (see label).

Storage

Store locked up.

Disposal

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

Statement(s) of Unknown Acute Toxicity

Inhalation 70.51% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
1317-65-3	Calcium carbonate	30-60
64742-65-0	Distillates, petroleum, solvent-dewaxed heavy paraffinic	15-40
78-79-5	Isoprene	1-5
14807-96-6	Talc	1-5
64742-47-8	Petroleum distillates, hydrotreated light	1-5
13463-67-7	Titanium dioxide	0.1-1
107-21-1	Ethylene glycol	0.1-1
1333-86-4	Carbon Black	<0.1

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

Eyes

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

Ingestion

If a large amount is swallowed, get medical attention.

Most Important Symptoms/Effects

Acute

Harmful if inhaled.

Delayed

Suspected of causing genetic defects. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

Note to Physicians

Treat symptomatically and supportively

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water

Unsuitable Extinguishing Media

None known.

Hazardous Combustion Products

Oxides of carbon. various organic fragments.

Advice for firefighters

Combustible Heating may cause an explosion Containers may rupture or explode

Fire Fighting Measures

Keep away from sources of ignition - No smoking Move material from fire area if it can be done without risk Use extinguishing agents appropriate for surrounding fire Dike for later disposal Stay upwind and keep out of low areas

Special Protective Equipment and Precautions for Firefighters

Wear protective clothing and equipment suitable for the surrounding fire, including helmet, face mask, and self-contained breathing apparatus.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8 Keep unnecessary people away, isolate hazard area and deny entry Only personnel trained for the hazards of this material should perform clean up and disposal

Methods and Materials for Containment and Cleaning Up

Eliminate all ignition sources if safe to do so. Ventilate the area. Stop leak if possible without personal risk. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

Environmental Precautions

Do not flush into sanitary sewer systems, drains or surface water Avoid release to the environment

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood Keep away from all ignition sources Do not breathe vapor or mist Avoid contact with eyes and skin. Do not eat, drink or smoke when using this product Always wear recommended personal protective equipment Wear personal protective clothing and equipment, see Section 8 Take precautionary measures against static discharge

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Store and handle in accordance with all current regulations and standards Store in a cool dry place Store in a well-ventilated area Keep container tightly closed Empty containers may contain product residue Keep separated from incompatible substances

Incompatible Materials

Strong oxidizer, strong acids, caustic solutions.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Calcium carbonate	**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]
Talc	**14807-96-6**
ACGIH:	2 mg/m3 TWA particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter
NIOSH:	2 mg/m3 TWA (containing no Asbestos and <1% Quartz) respirable dust
	1000 mg/m3 IDLH (containing no asbestos and <1% quartz)
OSHA (US):	20 mppcf TWA (if 1% Quartz or more use Quartz limit)
Mexico:	2 mg/m3 TWA VLE-PPT respirable fraction
Titanium dioxide	**13463-67-7**
ACGIH:	10 mg/m3 TWA
NIOSH:	2.4 mg/m3 TWA (CIB 63) fine ; 0.3 mg/m3 TWA (CIB 63) ultrafine, including engineered nanoscale
	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
Ethylene glycol	**107-21-1**
ACGIH:	25 ppm TWA vapor fraction
	50 ppm STEL vapor fraction ; 10 mg/m3 STEL inhalable particulate matter, aerosol only
Europe:	20 ppm TWA ; 52 mg/m3 TWA
	Possibility of significant uptake through the skin

	40 ppm STEL ; 104 mg/m3 STEL
Mexico:	100 mg/m3 Ceiling aerosol
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
OSHA (US):	3.5 mg/m3 TWA
Mexico:	3.5 mg/m3 TWA VLE-PPT
	7 mg/m3 STEL [PPT-CT]

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)
There are no biological limit values for any of this product's components.

Engineering Controls
Ventilation equipment should be explosion-resistant if explosive concentrations of material are present Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection
Wear chemical safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection
Wear appropriate chemical resistant clothing.

Respiratory Protection
In case of inadequate ventilation wear respiratory protection.

Glove Recommendations
Wear appropriate chemical resistant gloves

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white paste	**Physical State**	liquid
Odor	petroleum	**Color**	Not available
Odor Threshold	Not available	**pH**	Not available
Melting Point	>300 ºF	**Boiling Point**	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**	Not available
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	(negligible)	**Partition coefficient: n-octanol/water**	Not available
Viscosity	varies	**Kinematic viscosity**	Not available
Solubility (Other)	Not available	**Density**	1.52 - 1.58
Physical Form	paste	**VOC**	3.47 %
Molecular Weight	Not available		

Section 10 - STABILITY AND REACTIVITY

Reactivity
No reactivity hazard is expected
Chemical Stability
Stable at normal temperatures and pressure
Possibility of Hazardous Reactions
Will not polymerize
Conditions to Avoid
Avoid heat, flames, sparks and other sources of ignition Avoid contact with incompatible materials
Incompatible Materials
Strong oxidizer, strong acids, caustic solutions
Hazardous decomposition products
oxides of carbon. various organic fragments.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure
Inhalation
May cause respiratory tract irritation. May cause nausea, dizziness, drowsiness, unconsciousness, and central nervous system depression.
Skin Contact
May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin.
Eye Contact
May cause irritation, redness, and stinging.
Ingestion
May cause nausea, vomiting and stomach pain.
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:
Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)
Oral LD50 Rat >15000 mg/kg (no deaths occurred)
Dermal LD50 Rabbit >5000 mg/kg (no deaths occurred)
Inhalation LC50 Rat >2400 mg/m3 4 h (no deaths occurred)
Isoprene (78-79-5)

Dermal LD50 Rat >1 mL/kg
Inhalation LC50 Rat 180 mg/L 4 h

Petroleum distillates, hydrotreated light (64742-47-8)
Oral LD50 Rat >5000 mg/kg
Dermal LD50 Rabbit >2000 mg/kg
Inhalation LC50 Rat >5.2 mg/L 4 h

Titanium dioxide (13463-67-7)
Oral LD50 Rat >10000 mg/kg

Ethylene glycol (107-21-1)
Oral LD50 Rat 4700 mg/kg
Dermal LD50 Rat 10600 mg/kg

Carbon Black (1333-86-4)
Oral LD50 Rat >15400 mg/kg

Product Toxicity Data

Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Inhalation - Vapor	11 mg/L
Oral	> 2000 mg/kg

Immediate Effects
Harmful if inhaled.

Delayed Effects
Suspected of causing genetic defects. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

Irritation/Corrosivity Data
May cause skin, eye, and/or respiratory irritation.

Respiratory Sensitization
No information available for the product.

Dermal Sensitization
No information available for the product.

Component Carcinogenicity

Isoprene	**78-79-5**
IARC:	Monograph 71 [1999] ; Monograph 60 [1994] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
DFG:	Category 5 (low carcinogenic potency)
OSHA:	Present
Talc	**14807-96-6**
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)
IARC:	Monograph 93 [2010] (inhaled); Supplement 7 [1987] ; Monograph 42 [1987] (Group 3 (not classifiable))

DFG:	Category 3B (could be carcinogenic for man ;free of asbestos fibers)
Petroleum distillates, hydrotreated light	**64742-47-8**
DFG:	Category 3B (could be carcinogenic for man)
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
Ethylene glycol	**107-21-1**
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
Carbon Black	**1333-86-4**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 93 [2010] ; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3B (could be carcinogenic for man ;inhalable fraction)
OSHA:	Present
NIOSH:	potential occupational carcinogen

Results of a DuPont epidemiology study showed that employees who had been exposed to titanium dioxide pigments were at no greater risk of developing lung cancer than were employees who had not been exposed to titanium dioxide pigments. No pulmonary fibrosis was found in any of the employees and no associations were observed between titanium dioxide pigment exposure and chronic respiratory disease or lung abnormalities. Based on the results of this study, DuPont concluded that titanium dioxide pigment will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Germ Cell Mutagenicity

Suspected of causing genetic defects.

Tumorigenic Data

No data available

Reproductive Toxicity

May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

nervous system. respiratory system. brain.

Aspiration hazard

No information available for the product

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

No information available for the product

Component Analysis - Aquatic Toxicity

Distillates, petroleum, solvent-dewaxed heavy paraffinic	**64742-65-0**
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Isoprene	**78-79-5**
Fish:	LC50 96 h Lepomis macrochirus 32.5 - 50.15 mg/L [static]; LC50 96 h Pimephales promelas 58.75 - 95.32 mg/L [static]; LC50 96 h Poecilia reticulata 188.77 - 305.14 mg/L [static]
Algae:	EC50 96 h Scenedesmus quadricauda >1000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 140 mg/L IUCLID
Talc	**14807-96-6**
Fish:	LC50 96 h Brachydanio rerio >100 g/L [semi-static]
Petroleum distillates, hydrotreated light	**64742-47-8**
Fish:	LC50 96 h Pimephales promelas 45 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 2.2 mg/L [static]; LC50 96 h Oncorhynchus mykiss 2.4 mg/L [static]
Ethylene glycol	**107-21-1**
Fish:	LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static]; LC50 96 h Lepomis macrochirus 27540 mg/L [static]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static]; LC50 96 h Poecilia reticulata 16000 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 46300 mg/L IUCLID

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Bioconcentration

No information available for the product.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable federal, state/regional and local laws and 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

Further information: Not regulated as dangerous goods

IATA Information:

Further information: Not regulated as a hazardous material

IMDG Information:

Further information: Not regulated as a hazardous material

TDG Information:

Further information: Not regulated as dangerous goods

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.

Isoprene	**78-79-5**
IBC Code:	Category Y
Titanium dioxide	**13463-67-7**
IBC Code:	Category Z (slurry)
Ethylene glycol	**107-21-1**
IBC Code:	Category Y

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Isoprene	**78-79-5**

SARA 313:	0.1 % de minimis concentration
CERCLA:	100 lb final RQ ; 45.4 kg final RQ
Ethylene glycol	**107-21-1**
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ ; 2270 kg final RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories
Carcinogenicity; Acute toxicity; Reproductive Toxicity; Specific Target Organ Toxicity; Germ Cell Mutagenicity

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
Calcium carbonate	**1317-65-3**	No	Yes	Yes	Yes	Yes
Isoprene	**78-79-5**	Yes	Yes	Yes	Yes	Yes
Talc	**14807-96-6**	Yes	Yes	Yes	Yes	Yes
Titanium dioxide	**13463-67-7**	No	Yes	Yes	Yes	Yes
Ethylene glycol	**107-21-1**	Yes	Yes	Yes	Yes	Yes
Carbon Black	**1333-86-4**	Yes	Yes	Yes	Yes	Yes

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

WARNING

This product can expose you to chemicals including Isoprene, Titanium dioxide, Carbon Black , which are known to the State of California to cause cancer and Ethylene glycol , which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Isoprene	**78-79-5**
Carc:	carcinogen , 5/1/1996
Titanium dioxide	**13463-67-7**
Carc:	carcinogen , 9/2/2011 (airborne, unbound particles of respirable size)
Ethylene glycol	**107-21-1**
Repro/Dev. Tox	developmental toxicity , 6/19/2015 (ingested)
Carbon Black	**1333-86-4**

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

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

Isoprene	**78-79-5**
	1 %
Ethylene glycol	**107-21-1**
	1 %
Carbon Black	**1333-86-4**
	1 %

Component Analysis - Inventory

Calcium carbonate (1317-65-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	NSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Isoprene (78-79-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Talc (14807-96-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI -	KR KECI -	KR - REACH	CN	NZ	MX	TW	VN (Draft)

							Annex 1	Annex 2	CCA					
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Petroleum distillates, hydrotreated light (64742-47-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Titanium dioxide (13463-67-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Ethylene glycol (107-21-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Carbon Black (1333-86-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

Preparation Date
8/13/2018
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; F - Background (for Venezuela Biological Exposure Indices); 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 LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); 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; Sc - Semi-quantitative; 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); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.