Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name: Sure-Seal EP-95 Splicing Cement
Synonyms: Solvent-Based Adhesive
Chemical Family: Adhesive
Product Use: Splicing adhesive for EPDM Single-Ply Roofing Membrane
Restrictions on Use: For industrial use only.

Manufacturer Information

Carlisle SynTec
1285 Ritner Highway
Carlisle, PA 17013
USA
Phone: +1-800-479-6832
Emergency Phone #: +1-800-424-9300 (CHEMTREC)

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
Flammable Liquids - Category 2
Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Eye Irritation - Category 2A
Specific Target Organ Toxicity - Single Exposure - Category 1 (central nervous system, kidneys, liver, respiratory system)
Specific Target Organ Toxicity - Single Exposure - Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 1 (central nervous system, kidneys, respiratory system, Hematopoietic System)
Specific Target Organ Toxicity - Repeated Exposure - Category 2 (liver, spleen, Cardiovascular system)

GHS Label Elements

Symbol(s)



Signal Word
Danger

Hazard Statement(s)
Highly flammable liquid and vapor
Causes skin irritation
Causes serious eye irritation
Causes damage to organs

May cause respiratory irritation. May cause drowsiness or dizziness
Causes damage to organs through prolonged or repeated exposure
May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s)

Prevention
Keep container tightly closed
Keep away from heat/sparks/open flame/hot surfaces - No smoking
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Take precautionary measures against static discharge
Use only non-sparking tools
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/vapours/spray
Wash thoroughly after handling
Do not eat, drink or smoke when using this product

Response
In case of fire: Use appropriate media to extinguish
If exposed: Call a POISON CENTER or doctor/physician
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Call a POISON CENTER or doctor if you feel unwell
Specific treatment (see label)

Storage
Store in a well-ventilated place. Keep container tightly closed
Keep cool
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
Trade Secret	Polyphenol antioxidant	0.1-1
Mixture	Silicon adsorbent mixture	0.5-1.5
108-88-3	Toluene	30-60

1330-20-7	Xylene	7-13
64742-89-8	Solvent naphtha, petroleum, light aliphatic	5-10
67-63-0	Anhydrous isopropanol	5-10
Trade Secret	Tetraisopropyl titanate	1-5
Trade Secret	Phenolic resin	0.1-1
142-82-5	Heptane	5-10

Section 4 - FIRST AID MEASURES

Description of Necessary Measures
IF exposed or concerned: Get medical advice/attention.

Inhalation
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if not breathing. Call a POISON CENTER or doctor if you feel unwell.

Skin
Remove/Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs, get medical advice/attention.

Eyes
Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion
If swallowed, do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically and supportively.

Most Important Symptoms/Effects

Acute
Causes skin irritation. Causes serious eye irritation. Causes damage to organs: central nervous system, respiratory system, kidneys, liver. May cause respiratory irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

Delayed
Causes damage to organs through prolonged or repeated exposure: central nervous system, respiratory system, kidneys, Hematopoietic System. May cause damage to organs through prolonged or repeated exposure: liver, spleen, Cardiovascular system.

Note to Physicians
Contains: toluene, xylene, heptane, isopropanol.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, foam or carbon dioxide. Water may be ineffective. Use water spray to keep containers cool.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Highly flammable liquid and vapor. Can burn and explode easily when exposed to open flames or high heat. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

Hazardous Combustion Products

Oxides of carbon, oxides of nitrogen

Fire Fighting Measures

Wear full protective fire fighting 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

Remove all sources of ignition. Avoid breathing vapors. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Use non-sparking tools. 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Keep away from heat/sparks/open flames/hot surfaces. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use non-sparking tools. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid contact during pregnancy/while nursing. KEEP OUT OF REACH OF CHILDREN.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed
Keep cool
Store locked up
Keep dry. Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

Incompatible Materials

Strong oxidizing agents, acids, bases

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Toluene	108-88-3	
ACGIH:	20 ppm TWA	
NIOSH:	100 ppm TWA; 375 mg/m^3 TWA	150 ppm STEL; 560 mg/m3 STEL
	500 ppm IDLH	
Europe:	50 ppm TWA; 192 mg/m^3 TWA	100 ppm STEL; 384 mg/m^3 STEL
	Possibility of significant uptake through the skin	
OSHA (US):	200 ppm TWA	300 ppm Ceiling
Mexico:	50 ppm TWA LMPE-PPT; 188 mg/m^3 TWA LMPE-PPT	
	Skin - potential for cutaneous absorption	
Xylene	1330-20-7	
ACGIH:	100 ppm TWA	150 ppm STEL
Europe:	50 ppm TWA (pure); 221 mg/m^3 TWA (pure)	100 ppm STEL (pure); 442 mg/m^3 STEL (pure)
	Possibility of significant uptake through the skin	
OSHA (US):	100 ppm TWA; 435 mg/m^3 TWA	
Mexico:	100 ppm TWA LMPE-PPT; 435 mg/m^3 TWA LMPE-PPT	150 ppm STEL [LMPE-CT]; 655 mg/m^3 STEL [LMPE-CT]
Anhydrous isopropanol	67-63-0	

ACGIH:	200 ppm TWA	400 ppm STEL
NIOSH:	400 ppm TWA; 980 mg/m^3 TWA	500 ppm STEL; 1225 mg/m^3 STEL
	2000 ppm IDLH (10% LEL)	
OSHA (US):	400 ppm TWA; 980 mg/m^3 TWA	
Mexico:	400 ppm TWA LMPE-PPT; 980 mg/m^3 TWA LMPE-PPT	500 ppm STEL [LMPE-CT]; 1225 mg/m^3 STEL [LMPE-CT]
Magnesium oxide	1309-48-4	
ACGIH:	10 mg/m3 TWA inhalable fraction	
NIOSH:	750 mg/m3 IDLH fume	
OSHA (US):	15 mg/m3 TWA fume, total particulate	
Mexico:	10 mg/m3 TWA LMPE-PPT as Mg fume	
Heptane	142-82-5	
ACGIH:	400 ppm TWA	500 ppm STEL
NIOSH:	85 ppm TWA; 350 mg/m^3 TWA	440 ppm Ceiling 15 min; 1800 mg/m^3 Ceiling 15 min
	750 ppm IDLH	
Europe:	500 ppm TWA; 2085 mg/m^3 TWA	
OSHA (US):	500 ppm TWA; 2000 mg/m^3 TWA	
Mexico:	400 ppm TWA LMPE-PPT; 1600 mg/m^3 TWA LMPE-PPT	500 ppm STEL [LMPE-CT]; 2000 mg/m^3 STEL [LMPE-CT]
	Skin - potential for cutaneous absorption	

Biological limit value

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

Engineering Controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

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

Skin Protection

Wear appropriate work clothing. Wear protective shoes. Recommended material: protective skin cream.

Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	black liquid	**Physical State**	liquid
Odor	hydrocarbon	**Color**	black
Odor Threshold	Not available	**pH**	Not available
Melting Point	-95 to -47 °C (-139 to -53 °F)	**Boiling Point**	90 - 141 °C (194-286 °F)
Freezing point	Not available	**Evaporation Rate**	2.3
Boiling Point Range	Not available	**Flammability (solid, gas)**	Not available
Autoignition	230 °C (475 °F)	**Flash Point**	-13 °C (8 °F)
Lower Explosive Limit	0.9 %	**Decomposition**	Not available
Upper Explosive Limit	7 %	**Vapor Pressure**	21.8 mmHg
Vapor Density (air=1)	3.4	**Specific Gravity (water=1)**	Not available
Water Solubility	negligible	**Partition coefficient: n-octanol/water**	Not available
Viscosity	3600 cps	**Solubility (Other)**	Not available
Density	0.882 (relative)	**VOC**	605 g/L

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 oxidizing agents, acids, bases

Hazardous decomposition products
Oxides of carbon, oxides of nitrogen

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation
May cause respiratory irritation. May cause drowsiness or dizziness.

Skin Contact
Causes skin irritation.

Eye Contact
Causes serious eye irritation.

Ingestion
May cause gastrointestinal irritation.

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:

Polyphenol antioxidant (Trade Secret)
Oral LD50 Rat >200 mg/kg
Dermal LD50 Rabbit >5010 mg/kg
Inhalation LC50 Rat >165 mg/L 1 h

Toluene (108-88-3)
Oral LD50 Rat 2600 mg/kg
Dermal LD50 Rabbit 12000 mg/kg
Inhalation LC50 Rat 12.5 mg/L 4 h

Xylene (1330-20-7)
Oral LD50 Rat 3500 mg/kg
Dermal LD50 Rabbit >4350 mg/kg
Inhalation LC50 Rat 29.08 mg/L 4 h

Solvent naphtha, petroleum, light aliphatic (64742-89-8)
Oral LD50 Mouse 5000 mg/kg
Dermal LD50 Rabbit 3000 mg/kg

Anhydrous isopropanol (67-63-0)
Oral LD50 Rat 1870 mg/kg
Dermal LD50 Rabbit 4059 mg/kg
Inhalation LC50 Rat 72600 mg/m3 4 h

Tetraisopropyl titanate (Trade Secret)
Oral LD50 Rat 7460 µL/kg
Dermal LD50 Rabbit >16 mL/kg

Heptane (142-82-5)
Oral LD50 Mouse 5000 mg/kg
Dermal LD50 Rabbit 3000 mg/kg
Inhalation LC50 Rat 103 g/m^3 4 h

Immediate Effects
Causes skin irritation. Causes serious eye irritation. Causes damage to organs: central nervous system, respiratory system, kidneys, liver. May cause respiratory irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

Delayed Effects
Causes damage to organs through prolonged or repeated exposure: central nervous system, respiratory system, kidneys, Hematopoietic System. May cause damage to organs through prolonged or repeated exposure: liver, spleen, Cardiovascular system.

Irritation/Corrosivity Data
Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause gastrointestinal irritation.

Respiratory Sensitization
No data available.

Dermal Sensitization
It may cause sensitization in some individuals.

Component Carcinogenicity

Toluene	108-88-3
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
Xylene	1330-20-7
ACGIH:	A4 - Not Classifiable as a Human Carcinogen

IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
Anhydrous isopropanol	67-63-0
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977] (Group 3 (not classifiable))
Magnesium oxide	1309-48-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen

Germ Cell Mutagenicity
No data available.

Reproductive Toxicity
No data available.

Specific Target Organ Toxicity - Single Exposure
central nervous system, respiratory system, kidneys, liver

Specific Target Organ Toxicity - Repeated Exposure
central nervous system, respiratory system, kidneys, Hematopoietic System, spleen, Cardiovascular system, liver

Aspiration hazard
No data available.

Medical Conditions Aggravated by Exposure
Aspiration into the lungs may cause chemical pneumonitis.

Additional Data
No additional information available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity
Avoid release to the environment.

Component Analysis - Aquatic Toxicity

Polyphenol antioxidant	Trade Secret
Fish:	LC50 96 h Oncorhynchus mykiss >0.2 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata >0.2 mg/L IUCLID

Invertebrate:	EC50 48 h Daphnia magna >0.2 mg/L IUCLID
Toluene	108-88-3
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old); LC50 96 h Pimephales promelas 12.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oryzias latipes 54 mg/L [static]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [static] EPA; EC50 48 h Daphnia magna 11.5 mg/L IUCLID
Xylene	1330-20-7
Fish:	LC50 96 h Pimephales promelas 13.4 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 2.661 - 4.093 mg/L [static]; LC50 96 h Oncorhynchus mykiss 13.5 - 17.3 mg/L; LC50 96 h Lepomis macrochirus 13.1 - 16.5 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 19 mg/L; LC50 96 h Lepomis macrochirus 7.711 - 9.591 mg/L [static]; LC50 96 h Pimephales promelas 23.53 - 29.97 mg/L [static]; LC50 96 h Cyprinus carpio 780 mg/L [semi-static]; LC50 96 h Cyprinus carpio >780 mg/L; LC50 96 h Poecilia reticulata 30.26 - 40.75 mg/L [static]
Invertebrate:	EC50 48 h water flea 3.82 mg/L; LC50 48 h Gammarus lacustris 0.6 mg/L
Solvent naphtha, petroleum, light aliphatic	64742-89-8
Algae:	EC50 72 h Pseudokirchneriella subcapitata 4700 mg/L IUCLID
Anhydrous isopropanol	67-63-0
Fish:	LC50 96 h Pimephales promelas 9640 mg/L [flow-through];

	LC50 96 h Pimephales promelas 11130 mg/L [static]; LC50 96 h Lepomis macrochirus >1400000 µg/L
Algae:	EC50 96 h Desmodesmus subspicatus >1000 mg/L IUCLID; EC50 72 h Desmodesmus subspicatus >1000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 13299 mg/L IUCLID
Heptane	142-82-5
Fish:	LC50 96 h Cichlid fish 375 mg/L

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.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
Shipping Name:ADHESIVES
Hazard Class: 3
UN/NA #: UN1133
Packing Group: II
Required Label(s): 3

IATA Information:
Shipping Name:ADHESIVES
Hazard Class: 3
UN#: UN1133
Packing Group: II
Required Label(s): 3

TDG Information:

Shipping Name:ADHESIVES
Hazard Class: 3
UN#: UN1133
Packing Group: II
Required Label(s):

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.

Toluene	108-88-3
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ
Xylene	1330-20-7
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
Anhydrous isopropanol	67-63-0
SARA 313:	1 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

SARA Section 311/312 (40 CFR 370 Subparts B and C)
Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

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
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
Xylene	1330-20-7	Yes	Yes	Yes	Yes	Yes
Anhydrous isopropanol	67-63-0	Yes	Yes	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	Yes	Yes	Yes
Heptane	142-82-5	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 reproductive/developmental effects

Toluene	108-88-3
Repro/Dev. Tox	developmental toxicity , initial date 1/1/91
	female reproductive toxicity , initial date 8/7/09

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

Toluene	108-88-3
	1 %
Anhydrous isopropanol	67-63-0
	1 %
Magnesium oxide	1309-48-4
	1 %
Heptane	142-82-5
	1 %

Component Analysis - Inventory

Polyphenol antioxidant (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No

Toluene (108-88-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Xylene (1330-20-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Solvent naphtha, petroleum, light aliphatic (64742-89-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Anhydrous isopropanol (67-63-0)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

Tetraisopropyl titanate (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Magnesium oxide (1309-48-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Heptane (142-82-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 2 Fire: 3 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings

Health: 2 Fire: 3 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes
Revision Date: June 1, 2018
Revision Note: General Note

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; 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; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; 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; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; 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; 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; 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; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

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. 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.