

Safety Data Sheet

Material Name: Penta Work Solution

SDS ID: STE-017

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

Penta Work Solution

Product Use

Wood preservative

Restrictions on Use

USEPA/FIFRA Restricted use pesticide.

Details of the supplier of the safety data sheet

McFarland Cascade Holdings, Inc

P.O. Box 1496

Tacoma WA 98401

Phone: 253-572-3033

Emergency Phone #: Chemtrec (800-424-9300)

Fax: 253-798-5863

Section 2 - HAZARDS IDENTIFICATION

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

Flammable Liquids - Category 4

Aspiration Hazard - Category 1

Acute Toxicity - Oral - Category 3

Acute Toxicity - Dermal - Category 3

Acute Toxicity - Inhalation - Vapor - Category 3

Skin Corrosion/Irritation - Category 2

Skin Sensitization - Category 1A

Carcinogenicity - Category 2

Reproductive Toxicity - Category 1A

Specific Target Organ Toxicity - Single Exposure - Category 1 (Central Nervous System , heart)

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (Hematopoietic System , heart , kidneys , liver , nervous system , respiratory system)

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Hazardous to the Aquatic Environment - Acute - Category 1

Hazardous to the Aquatic Environment - Chronic - Category 1

GHS Label Elements

Symbol(s)



Signal Word

Danger

Hazard Statement(s)

Combustible liquid.

May be fatal if swallowed and enters airways.

Toxic if swallowed.

Toxic in contact with skin.

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Toxic if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
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.
Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood. Use by licensed pesticide applicator only.
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.
Contaminated work clothing must not be allowed out of the workplace.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

Response

In case of fire: Use appropriate media to extinguish.
Collect spillage.
If exposed: Call a POISON CENTER or doctor/physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Take off immediately all contaminated clothing and wash it before reuse.
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Do NOT induce vomiting.
Rinse mouth.
Call a POISON CENTER or doctor.
Specific treatment (see label).

Storage

Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store in secure area.

Disposal

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

Statement of Unknown Toxicity

93.0592% of the mixture consists of ingredient(s) of unknown acute toxicity.

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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
68476-34-6	Fuels, diesel, no. 2	74.4
67784-80-9	Soybean oil, methyl ester	37.2
87-86-5	Pentachlorophenol	6.02
58-90-2	2,3,4,6-Tetrachlorophenol	<1
91-20-3	Naphthalene	<1
7704-34-9	Sulfur	<1

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor.

Skin

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Take off immediately all contaminated clothing and wash it before reuse. Call a POISON CENTER or doctor.

Eyes

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth.

Most Important Symptoms/Effects

Acute

May be fatal if swallowed and enters airways. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Causes skin irritation. May cause allergic skin reaction.

Delayed

Cancer, reproductive effects, liver damage, kidney damage, heart damage, nervous system damage, respiratory system damage

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 carbon dioxide, regular dry chemical, regular foam or water. Large fires: Use water spray, fog or regular foam.

Unsuitable Extinguishing Media

Do not use water jets.

Special Hazards Arising from the Chemical

Combustible liquid. Vapors or gases may ignite at distant ignition sources and flash back. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide, hydrocarbons

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Fire Fighting Measures

Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Special Protective Equipment and Precautions for Firefighters

Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Eliminate all sources of ignition. Do not touch or walk through spilled material.

Methods and Materials for Containment and Cleaning Up

Combustible liquid. Eliminate all ignition sources if safe to do so. Keep unnecessary people away, isolate hazard area and deny entry. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Prevent entry into waterways, sewers, basements, or confined areas. Absorb with earth, sand or other non-combustible material and transfer to container. Use non-sparking tools and equipment. Dike for later disposal. Water spray may be used to knock down or divert vapor clouds.

Environmental Precautions

Avoid release to the environment.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Ground any equipment used in handling. Use non-sparking tools and equipment. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store in secure area.

Store in accordance with all current regulations and standards. Keep away from incompatible materials.

Incompatible Materials

Strong oxidizing materials.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Fuels, diesel, no. 2	68476-34-6
ACGIH:	100 mg/m3 TWA as total hydrocarbons inhalable fraction and vapor
	Skin - potential significant contribution to overall exposure by the cutaneous route
Pentachlorophenol	87-86-5
ACGIH:	0.5 mg/m3 TWA inhalable fraction and vapor

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	1 mg/m3 STEL inhalable fraction and vapor
	Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	0.5 mg/m3 TWA
	Potential for dermal absorption
	2.5 mg/m3 IDLH
OSHA (US):	0.5 mg/m3 TWA
	Prevent or reduce skin absorption
Mexico:	0.5 mg/m3 TWA VLE-PPT
	1.5 mg/m3 STEL [PPT-CT]
	Skin - potential for cutaneous absorption
Naphthalene	91-20-3
ACGIH:	10 ppm TWA
	Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	10 ppm TWA ; 50 mg/m3 TWA
	15 ppm STEL ; 75 mg/m3 STEL
	250 ppm IDLH
Europe:	10 ppm TWA ; 50 mg/m3 TWA
OSHA (US):	10 ppm TWA ; 50 mg/m3 TWA
Mexico:	10 ppm TWA VLE-PPT ; 50 mg/m3 TWA VLE-PPT
	15 ppm STEL [PPT-CT] ; 75 mg/m3 STEL [PPT-CT]

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

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

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

Pentachlorophenol (87-86-5)

Medium: urine Time: prior to last shift of workweek Parameter: Pentachlorophenol with hydrolysis (nonquantitative)

Naphthalene (91-20-3)

Time: end of shift Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis (nonquantitative, nonspecific)

Engineering Controls

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

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Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

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

Skin Protection

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid	Physical State	liquid
Odor	hydrocarbon odor	Color	light brown - black
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	153.9 °C (309 to 700 °F Diesel Fuel)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	(Slower Ether = 1)	Flammability (solid, gas)	Not available
Autoignition Temperature	256.7 °C (>494 °F Diesel Fuel)	Flash Point	>140 °F
Lower Explosive Limit	0.6 % (Diesel Fuel)	Decomposition temperature	Not available
Upper Explosive Limit	7.5 % (Diesel Fuel)	Vapor Pressure	Not available
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available
Water Solubility	(Insoluble)	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	Physical Form	liquid
Molecular Weight	Not available		

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

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Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition.

Incompatible Materials

Strong oxidizing materials

Hazardous decomposition products

Carbon monoxide, carbon dioxide, hydrocarbons

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

Toxic if inhaled, irritation, allergic reactions, nosebleed, nausea, vomiting, loss of appetite, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, heart damage, kidney damage, liver damage, respiratory system damage

Skin Contact

Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

Eye Contact

Irritation

Ingestion

May be fatal if swallowed and enters airways. Toxic if swallowed, irritation, nausea, vomiting, diarrhea, difficulty breathing, irregular heartbeat, headache, drowsiness, central nervous system effects, liver damage, kidney damage

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:

Pentachlorophenol (87-86-5)

Oral LD50 Rat 27 mg/kg

Dermal LD50 Rabbit 40 mg/kg

2,3,4,6-Tetrachlorophenol (58-90-2)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rat >5000 mg/kg

Naphthalene (91-20-3)

Oral LD50 Rat 1110 mg/kg

Dermal LD50 Rabbit 1120 mg/kg

Inhalation LC50 Rat >340 mg/m³ 1 h

Sulfur (7704-34-9)

Oral LD50 Rat >3000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Inhalation LC50 Rat >9.23 mg/L 4 h

Product Toxicity Data

Acute Toxicity Estimate

Dermal	50.7687 mg/kg
Inhalation - Vapor	0.5764 mg/L
Oral	34.2689 mg/kg

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Immediate Effects

May be fatal if swallowed and enters airways. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. May cause an allergic skin reaction.

Delayed Effects

Reproductive Effects, cancer. Causes damage to organs: central nervous system, heart, hematopoietic system, kidneys, liver, respiratory system

Irritation/Corrosivity Data

Causes skin irritation, allergic skin reaction

Respiratory Sensitization

No data available.

Dermal Sensitization

May cause an allergic skin reaction.

Component Carcinogenicity

Fuels, diesel, no. 2	68476-34-6
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Pentachlorophenol	87-86-5
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 71 [1999] ; Monograph 53 [1991] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
DFG:	Category 2 (considered to be carcinogenic for man)
OSHA:	Present
2,3,4,6-Tetrachlorophenol	58-90-2
IARC:	Monograph 71 [1999] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
Naphthalene	91-20-3
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
DFG:	Category 2 (considered to be carcinogenic for man)
OSHA:	Present

Suspected of causing cancer.

Germ Cell Mutagenicity

No data available.

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Tumorigenic Data No data available

Reproductive Toxicity

May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Central Nervous System, heart

Specific Target Organ Toxicity - Repeated Exposure

Hematopoietic System, heart, kidneys, liver, nervous system, respiratory system

Aspiration hazard

May be fatal if swallowed and enters airways.

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

Fuels, diesel, no. 2	68476-34-6
Fish:	LC50 96 h Pimephales promelas 35 mg/L [flow-through]
Pentachlorophenol	87-86-5
Fish:	LC50 96 h Pimephales promelas 0.079 - 0.187 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.11 - 0.49 mg/L [static]; LC50 96 h Oncorhynchus mykiss 0.031 - 0.038 mg/L [static]; LC50 96 h Oncorhynchus mykiss 0.102 - 0.128 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 0.103 - 0.129 mg/L [flow-through]; LC50 96 h Oryzias latipes 0.17 - 0.3 mg/L [static]; LC50 96 h Poecilia reticulata 0.36 mg/L
Algae:	EC50 96 h Pseudokirchneriella subcapitata 0.005 - 0.3 mg/L [static] EPA ; EC50 72 h Pseudokirchneriella subcapitata 0.1 mg/L [static] EPA ; EC50 72 h Desmodesmus subspicatus 0.183 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 0.138 - 0.307 mg/L [Static] EPA
2,3,4,6-Tetrachlorophenol	58-90-2
Fish:	LC50 96 h Pimephales promelas 0.95 - 1.11 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 110 - 160 µg/L [static]; LC50 96 h Oncorhynchus mykiss 460 - 830 µg/L [static]; LC50 96 h Poecilia reticulata 600 µg/L
Naphthalene	91-20-3
Fish:	LC50 96 h Pimephales promelas 5.74 - 6.44 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 1.6 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 0.91 - 2.82 mg/L [static]; LC50 96 h Pimephales promelas 1.99 mg/L [static]; LC50 96 h Lepomis macrochirus 31.0265 mg/L [static]

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Invertebrate:	LC50 48 h Daphnia magna 2.16 mg/L IUCLID ; EC50 48 h Daphnia magna 1.96 mg/L [Flow through] EPA ; EC50 48 h Daphnia magna 1.09 - 3.4 mg/L [Static] EPA
Sulfur	7704-34-9
Fish:	LC50 96 h Brachydanio rerio 866 mg/L [static] ; LC50 96 h Lepomis macrochirus <14 mg/L [static] ; LC50 96 h Oncorhynchus mykiss >180 mg/L [static]

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available for the mixture.

Mobility

No data available for the mixture.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

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

Section 14 - TRANSPORT INFORMATION

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants

Component	CAS #	Minimum Concentration
Pentachlorophenol	87-86-5	DOT regulated marine pollutant

US DOT Information:

Shipping Name: TOXIC LIQUIDS, ORGANIC, N.O.S. (Pentachlorophenol)

Hazard Class: 6.1

UN/NA #: UN2810

Packing Group: II

Required Label(s): 6.1

TDG Information:

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (Pentachlorophenol)

Hazard Class: 6.1

UN#: UN2810

Packing Group: II

Required Label(s): 6.1

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.

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Pentachlorophenol	87-86-5
SARA 313:	0.1 % de minimis concentration
CERCLA:	10 lb final RQ ; 4.54 kg final RQ
2,3,4,6-Tetrachlorophenol	58-90-2
CERCLA:	10 lb final RQ ; 4.54 kg final RQ
Naphthalene	91-20-3
SARA 313:	0.1 % de minimis concentration
CERCLA:	100 lb final RQ ; 45.4 kg final RQ

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
Pentachlorophenol	87-86-5	Yes	Yes	Yes	Yes	Yes
2,3,4,6-Tetrachlorophenol	58-90-2	No	Yes	No	Yes	Yes
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes
Sulfur	7704-34-9	Yes	Yes	No	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

Pentachlorophenol	87-86-5
Carc:	carcinogen , 1/1/1990
Naphthalene	91-20-3
Carc:	carcinogen , 4/19/2002

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

Naphthalene	91-20-3
	1 %

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Component Analysis - Inventory
Fuels, diesel, no. 2 (68476-34-6)

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

Soybean oil, methyl ester (67784-80-9)

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

Pentachlorophenol (87-86-5)

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

2,3,4,6-Tetrachlorophenol (58-90-2)

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

Naphthalene (91-20-3)

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

Sulfur (7704-34-9)

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

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 3 Fire: 3 Reactivity: 0

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

Summary of Changes

SDS update: 09/21/2016

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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; CFR - Code of Federal Regulations (US); 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; 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; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; 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; 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:

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.