



**Product Name:** TISS-U-FILL CO-INJECTION FLUID

**Section 1 - PRODUCT AND COMPANY IDENTIFICATION**

**Material Name**

TISS-U-FILL CO-INJECTION FLUID

**Synonyms**

TISS-U-FILL (Humectant)

**Product Use**

Funeral Home Embalming Products.

**Restrictions on Use**

This product should only be used by Licensed Embalmers.

**Details of the supplier of the safety data sheet**

Dr. G.H. Michel - Restor-Skin Company  
PO Box 337  
202 Sixth Street  
East Brady, PA 16028  
Phone: 1-800-635-3403  
Emergency Phone #: 1-724-526-3565  
E-mail: fourcogs16028@yahoo.com

**Product Code**

Product Size(s): 16 oz. (Pint) Bottles

**Section 2 - HAZARDS IDENTIFICATION**

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

- Acute Toxicity - Oral - Category 4
- Acute Toxicity - Inhalation - Vapor - Category 2
- Skin Corrosion/Irritation - Category 2
- Serious Eye Damage/Eye Irritation - Category 2A
- Respiratory Sensitization - Category 1A
- Skin Sensitization - Category 1A
- Germ Cell Mutagenicity - Category 1A
- Carcinogenicity - Category 1A
- Reproductive Toxicity - Category 1A
- Specific Target Organ Toxicity - Single Exposure - Category 1 ( Central Nervous System , heart , kidneys , respiratory system , nervous system )
- Specific Target Organ Toxicity - Single Exposure - Category 2
- Specific Target Organ Toxicity - Repeated Exposure - Category 1 ( Central Nervous System , heart , respiratory system , kidneys )
- Specific Target Organ Toxicity - Repeated Exposure - Category 2

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

- Harmful if swallowed.
- Fatal if inhaled.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- May cause genetic defects.
- May cause cancer.
- May damage fertility or the unborn child.
- Causes damage to organs.
- May cause 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.
- Wear respiratory protection.
- 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.

**Response**

- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
- 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.
- IF ON SKIN: Wash with plenty of soap and water.
- Wash contaminated clothing before reuse.
- Take off contaminated clothing and wash before reuse.
- IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- Rinse mouth.
- Specific treatment is urgent (see label).

**Storage**

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

**Disposal**

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

**Statement of Unknown Toxicity**

- 98.383% of the mixture consists of ingredient(s) of unknown acute toxicity.

<b>Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS</b>
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CAS	Component Name	Percent
107-21-1	Ethylene glycol	10-15
50-00-0	Formaldehyde	1-5

57-55-6	Propylene glycol	1-5
No CAS Number	Dye	<1
Not Available	Seaweed Extract	<1
8002-33-3	Castor oil, sulfated	<1
67-56-1	Methyl alcohol	<1

The chemical identity and/or percentage of composition is being withheld as a trade secret.

## Section 4 - FIRST AID MEASURES

### **Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

### **Skin**

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

### **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 SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

### **Most Important Symptoms/Effects**

#### **Acute**

Harmful if swallowed. Fatal if inhaled. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Causes damage to central nervous system, heart, kidneys, respiratory system, and nervous system. May cause damage to organs.

#### **Delayed**

May produce an allergic reaction. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to respiratory system, heart, kidney, central nervous system through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

### **Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

## Section 5 - FIRE FIGHTING MEASURES

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Carbon dioxide, regular foam, dry chemical, water.

#### **Unsuitable Extinguishing Media**

Do not use water jet.

### **Special Hazards Arising from the Chemical**

Slight fire hazard.

### **Hazardous Combustion Products**

Oxides of carbon, soot.

### **Fire Fighting Measures**

Use methods suitable to fight surrounding fire. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Avoid inhalation of material or combustion by-products.

### Special Protective Equipment and Precautions for Firefighters

Wear personal protective clothing and equipment such as 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 ignition sources. Stop leak if you can do it without risk. Absorb spill with inert material. Shovel material into appropriate container for disposal. Do not touch or walk through spilled product. Avoid dust generation and accumulation. Avoid breathing vapors or fumes. Avoid release to the environment.

### Environmental Precautions

Avoid release to the environment. Collect spillage.

## 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. 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. Wear respiratory protection. 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.

### Conditions for Safe Storage, Including any Incompatibilities

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

Store locked up.

Further information on storage conditions: Keep away from heat, sparks, open flame or other ignition sources. Store away from strong acids.

### Incompatible Materials

Strong acids

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

<b>Ethylene glycol</b>	<b>107-21-1</b>
ACGIH:	100 mg/m <sup>3</sup> Ceiling aerosol only
Europe:	20 ppm TWA ; 52 mg/m <sup>3</sup> TWA
	Possibility of significant uptake through the skin
	40 ppm STEL ; 104 mg/m <sup>3</sup> STEL
Mexico:	100 mg/m <sup>3</sup> Ceiling aerosol
<b>Formaldehyde</b>	<b>50-00-0</b>
ACGIH:	0.3 ppm Ceiling
NIOSH:	0.016 ppm TWA
	0.1 ppm Ceiling 15 min
	20 ppm IDLH

OSHA (US):	0.75 ppm TWA
	2 ppm STEL (See 29 CFR 1910.1048 ) 15 min ; 0.5 ppm Action Level (See 29 CFR 1910.1048 ); 0.75 ppm TWA (See 29 CFR 1910.1048 )
	2 ppm STEL (see 29 CFR 1910.1048 )
Mexico:	2 ppm Ceiling ; 3 mg/m3 Ceiling
<b>Methyl alcohol</b>	<b>67-56-1</b>
ACGIH:	200 ppm TWA
	250 ppm STEL
	Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	200 ppm TWA ; 260 mg/m3 TWA
	250 ppm STEL ; 325 mg/m3 STEL
	Potential for dermal absorption
	6000 ppm IDLH
Europe:	200 ppm TWA ; 260 mg/m3 TWA
	Possibility of significant uptake through the skin
OSHA (US):	200 ppm TWA ; 260 mg/m3 TWA
Mexico:	200 ppm TWA VLE-PPT ; 260 mg/m3 TWA VLE-PPT
	250 ppm STEL [PPT-CT ] ; 310 mg/m3 STEL [PPT-CT ]
	Skin - potential for cutaneous absorption

#### 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)

##### Methyl alcohol (67-56-1)

15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

#### Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

#### Individual Protection Measures, such as Personal Protective Equipment

##### Eye/face protection

Wear chemical safety goggles with a face shield to protect against skin and eye contact when appropriate.

##### Skin Protection

Wear appropriate work clothing.

##### Respiratory Protection

Respiratory protection is required for not sufficiently ventilated working places and during the spraying processing.

##### Glove Recommendations

Wear appropriate chemical resistant gloves: neoprene, rubber gloves.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	thick pink liquid	<b>Physical State</b>	liquid
<b>Odor</b>	Low ,Odor	<b>Color</b>	pink
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F (approx )
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	>100 °C (>212 °F )
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	100 %	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	Not available	<b>Molecular Weight</b>	Not available

### Other Information

No additional information available for the product.

## Section 10 - STABILITY AND REACTIVITY

### Chemical Stability

Stable under normal temperatures and pressures.

### Possibility of Hazardous Reactions

Hazardous polymerization is not expected to occur.

### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Keep away from incompatible materials.

### Incompatible Materials

Strong acid.

### Hazardous decomposition products

Oxides of carbon, formaldehyde gas

### Thermal decomposition products

Oxides of carbon.

## Section 11 - TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### Inhalation

Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Skin Contact

Causes skin irritation. May cause allergic skin reaction.

#### Eye Contact

Causes serious eye irritation.

#### Ingestion

Harmful if swallowed.

## 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:

#### Ethylene glycol (107-21-1)

Oral LD50 Rat 4700 mg/kg

Dermal LD50 Rat 10600 mg/kg

#### Formaldehyde (50-00-0)

Oral LD50 Rat 100 mg/kg

Dermal LD50 Rabbit 270 mg/kg

Inhalation LC50 Rat 0.578 mg/L 4 h

#### Propylene glycol (57-55-6)

Oral LD50 Rat 20 g/kg

Dermal LD50 Rabbit 20800 mg/kg

#### Methyl alcohol (67-56-1)

Oral LD50 Rat 6200 mg/kg

Inhalation LC50 Rat 22500 ppm 8 h

## Product Toxicity Data

### Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Inhalation - Vapor	0.7654 mg/L
Oral	1172.9731 mg/kg

### Immediate Effects

Harmful if swallowed. Fatal if inhaled. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Causes damage to central nervous system, heart, kidneys, respiratory system, nervous system, May cause damage to organs.

### Delayed Effects

May produce an allergic reaction. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to respiratory system, heart, kidneys, central nervous system through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

### Irritation/Corrosivity Data

Causes skin irritation and eye irritation.

### Respiratory Sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Dermal Sensitization

May cause allergic skin reaction.

### Component Carcinogenicity

<b>Ethylene glycol</b>	<b>107-21-1</b>
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
<b>Formaldehyde</b>	<b>50-00-0</b>
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100F [2012] ; Monograph 88 [2006] ; Monograph 62 [1995] ; Supplement 7 [1987] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen
DFG:	Category 4 (no significant contribution to human cancer )

OSHA:	Present
OSHA:	see 29 CFR 1910.1048
NIOSH:	potential occupational carcinogen

**Germ Cell Mutagenicity**

May cause genetic defects.

**Tumorigenic Data**

No information available for the product.

**Reproductive Toxicity**

May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

Central Nervous System, heart, respiratory system, kidneys, nervous system

**Specific Target Organ Toxicity - Repeated Exposure**

Central Nervous System, heart, respiratory system, kidneys

**Aspiration hazard**

No information available for the product.

**Medical Conditions Aggravated by Exposure**

No data available.

**Section 12 - ECOLOGICAL INFORMATION**

**Component Analysis - Aquatic Toxicity**

<b>Ethylene glycol</b>	<b>107-21-1</b>
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
<b>Formaldehyde</b>	<b>50-00-0</b>
Fish:	LC50 96 h Pimephales promelas 22.6 - 25.7 mg/L [flow-through ]; LC50 96 h Lepomis macrochirus 1510 µg/L [static ]; LC50 96 h Brachydanio rerio 41 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 0.032 - 0.226 mL/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 100 - 136 mg/L [static ]; LC50 96 h Pimephales promelas 23.2 - 29.7 mg/L [static ]
Invertebrate:	LC50 48 h Daphnia magna 2 mg/L IUCLID ; EC50 48 h Daphnia magna 11.3 - 18 mg/L [Static ] EPA
<b>Propylene glycol</b>	<b>57-55-6</b>
Fish:	LC50 96 h Oncorhynchus mykiss 51600 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 41 - 47 mL/L [static ]; LC50 96 h Pimephales promelas 51400 mg/L [static ]; LC50 96 h Pimephales promelas 710 mg/L
Algae:	EC50 96 h Pseudokirchneriella subcapitata 19000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L [Static ] EPA



<b>Methyl alcohol</b>	<b>67-56-1</b>
Fish:	LC50 96 h Pimephales promelas 28200 mg/L [flow-through ]; LC50 96 h Pimephales promelas >100 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static ]; LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through ]

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

**Section 13 - DISPOSAL CONSIDERATIONS**

**Disposal Methods**

Dispose in accordance with federal, state, provincial, and local regulations. The responsibility for proper waste disposal lies with the owner of the waste.

**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 as a hazardous material

**IATA Information:**

UN#: Not regulated as a hazardous material

**ICAO Information:**

UN#: Not regulated as a hazardous material

**IMDG Information:**

UN#: Not regulated as a hazardous material

**TDG Information:**

UN#: Not regulated as a hazardous material

**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.

<b>Ethylene glycol</b>	<b>107-21-1</b>
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
<b>Formaldehyde</b>	<b>50-00-0</b>
SARA 302:	500 lb TPQ

SARA 313:	0.1 % de minimis concentration
CERCLA:	100 lb final RQ ; 45.4 kg final RQ
OSHA (safety):	1000 lb TQ
SARA 304:	100 lb EPCRA RQ
<b>Methyl alcohol</b>	<b>67-56-1</b>
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ ; 2270 kg final RQ

### 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
<b>Ethylene glycol</b>	<b>107-21-1</b>	Yes	Yes	Yes	Yes	Yes
<b>Formaldehyde</b>	<b>50-00-0</b>	Yes	Yes	Yes	Yes	Yes
<b>Propylene glycol</b>	<b>57-55-6</b>	No	No	Yes	Yes	Yes
<b>Methyl alcohol</b>	<b>67-56-1</b>	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

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

<b>Ethylene glycol</b>	<b>107-21-1</b>
Repro/Dev. Tox	developmental toxicity , 6/19/2015 (ingested )
<b>Formaldehyde</b>	<b>50-00-0</b>
Carc:	carcinogen , 1/1/1988 (gas )
<b>Methyl alcohol</b>	<b>67-56-1</b>
Repro/Dev. Tox	developmental toxicity , 3/16/2012

### 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

<b>Ethylene glycol</b>	<b>107-21-1</b>	1 %
<b>Formaldehyde</b>	<b>50-00-0</b>	0.1 %
<b>Propylene glycol</b>	<b>57-55-6</b>	1 %
<b>Methyl alcohol</b>	<b>67-56-1</b>	1%

**Component Analysis - Inventory**  
**Ethylene glycol (107-21-1)**

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

**Formaldehyde (50-00-0)**

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	Yes	Yes	Yes

**Propylene glycol (57-55-6)**

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	Yes	Yes	Yes

**Castor oil, sulfated (8002-33-3)**

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	No	Yes

**Methyl alcohol (67-56-1)**

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

**Section 16 - OTHER INFORMATION**

**NFPA Ratings**

Health: 2 Fire: 1 Reactivity: 0

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

**Summary of Changes**

New SDS: April 28, 2016 / SDS Update Rev 1: October 10, 2016 / SDS Update Rev 2: May 17, 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; 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); NFFPA - 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, Authorization, 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.