

Revision Date 25-Feb-2015

Version 1

SAFETY DATA SHEET

1. IDENTIFICATION				
<u>Product identifier</u> Product Name	21351 REAR WINDOW DEFOGGER TAB ADHESIVE .01FO PART 1			
<u>Other means of identification</u> Product Code Synonyms	190510H None			
Recommended use of the chemical				
Recommended Use Uses advised against	Adhesive No information available			
oses advised against				
Details of the supplier of the safety				
Manufacturer Address	Distributor ITW Permatex Canada			
10 Columbus Blvd.	35 Brownridge Road, Unit 1			
Hartford, CT 06106 USA	Halton Hills, ON Canada L7G 0C6			
	Telephone: (800) 924-6994			
Company Phone Number	1-87-Permatex			
	(877) 376-2839			
24 Hour Emergency Phone Number	Chem-Tel: 800-255-3924 International Emergency:			
	00+1+ 813-248-0585			
	Contract Number: MIS0003453			

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

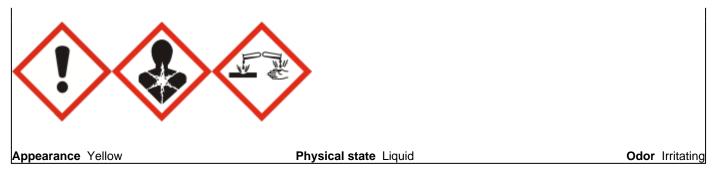
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Danger

Causes severe skin burns and eye damage May cause an allergic skin reaction May cause damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse If skin irritation or rash occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed. May be harmful in contact with skin. Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

48.75241% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Trade Secret
HYDROXYALKYL METHACRYLATE	27813-02-1	15 - 40	*
ALIPHATIC URETHANE METHACRYLATE	3290-92-4	5 - 10	*
ACRYLIC ACID	79-10-7	1 - 5	*
ALUMINUM SILICATE	1302-93-8	1 - 5	*
DIMETHYLBENZYL HYDROPEROXIDE	80-15-9	1 - 5	*
GLASS	65997-17-3	1 - 5	*
2-HYDROXYETHYL METHACRYLATE	868-77-9	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Description of first and measures			
General advice	Get medical advice/attention if you feel unwell.		
Eye contact	IF IN EYES:. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.		
Skin contact	IF ON SKIN:. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention/advice. Wash contaminated clothing before reuse.		
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.		
Ingestion	IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.		
Self-protection of the first aider	Use personal protective equipment as required.		
Most important symptoms and effe	cts, both acute and delayed		
Symptoms	See section 2 for more information.		
Indication of any immediate medica	al attention and special treatment needed		
Note to physicians	Treat symptomatically.		
	5. FIRE-FIGHTING MEASURES		
<u>Suitable extinguishing media</u> Carbon dioxide (CO2), Dry chemical, Foam			
<u>Unsuitable extinguishing media</u> None.			
Specific hazards arising from the chemical None in particular.			
<u>Explosion data</u> Sensitivity to Mechanical Impact Sensitivity to Static Discharge	None. None.		
Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
	6. ACCIDENTAL RELEASE MEASURES		
Personal processitions, protective equipment and emergency procedures			

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.
Environmental precautions	
Environmental precautions	Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up			
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.		
	7. HANDLING AND STORAGE		
Precautions for safe handling			
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.		
Conditions for safe storage, including any incompatibilities			
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.		
Incompatible materials	Strong oxidizing agents, Strong bases		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACRYLIC ACID 79-10-7	TWA: 2 ppm S*	(vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m ³ (vacated) S*	TWA: 2 ppm TWA: 6 mg/m ³
ALUMINUM SILICATE 1302-93-8	TWA: 1 mg/m ³ respirable fraction	-	-
GLASS 65997-17-3	TWA: 1 fiber/cm3 respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m ³ inhalable fraction		-

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls	Showers	
	Eyewash stations	
	Ventilation systems	

Individual protection measures, such as personal protective equipment

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Eye/face protection	Tight sealing safety goggles.
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Odor Odor threshold	Liquid Yellow Irritating No information available	
Property	Values	Remarks • Method
рН	Does not apply	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 149 °C / 300 °F	
Flash point	> 93 °C / > 199 °F	Tag Closed Cup
Evaporation rate	< 1	Butyl acetate = 1
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	Not determined	
Vapor density	>1	Air = 1
Relative density	1.08 @ 80°F	
Water solubility	Insoluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	
Other Information		
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	7%	
Density	No information available	
Bulk density	No information available	
-		

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Excessive heat.

Incompatible materials

Strong oxidizing agents, Strong bases

Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	May be harmful if inhaled.
Eye contact	Severely irritating to eyes. May cause burns.
Skin contact	Contact causes severe skin irritation and possible burns.
Ingestion	May be harmful if swallowed. Can burn mouth, throat, and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
HYDROXYALKYL METHACRYLATE 27813-02-1	= 11200 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
ALIPHATIC URETHANE METHACRYLATE 3290-92-4	= 5660 μL/kg (Rat)	= 16 mL/kg (Rabbit)	-
ACRYLIC ACID 79-10-7	= 193 mg/kg (Rat)= 33500 µg/kg (Rat)	= 280 μL/kg (Rabbit)= 295 mg/kg (Rabbit)	= 11.1 mg/L (Rat)1 h = 3.6 mg/L (Rat)4 h
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat)4 h
2-HYDROXYETHYL METHACRYLATE 868-77-9	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Germ cell mutagenicity	No informatio No informatio			
Carcinogenicity		ow indicates whether each	agency has listed any ing	redient as a carcinogen.
Chemical Name	ACGIH	IARC	NTP	OSHA
ACRYLIC ACID 79-10-7	-	Group 3	-	-
GLASS 65997-17-3	-	Group 3	-	-
A2 - Suspected Human (IARC (International Age Group 1 - Carcinogenic t Not classifiable as a hum NTP (National Toxicolo Known - Known Carcinog	ency for Research on Cancel o Humans an carcinogen gy Program) gen afety and Health Administrat)	f Labor)	

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	2564 mg/kg
ATEmix (dermal)	2826 mg/kg
ATEmix (inhalation-dust/mist)	6.6 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known

81.14791% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
HYDROXYALKYL METHACRYLATE 27813-02-1	-	493: 48 h Leuciscus idus melanotus mg/L LC50 static	-
ALIPHATIC URETHANE METHACRYLATE 3290-92-4	-	144: 96 h Oncorhynchus mykiss mg/L LC50 160: 96 h Pimephales promelas mg/L LC50 112: 96 h Lepomis macrochirus mg/L LC50	-
ACRYLIC ACID 79-10-7	0.17: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.04: 72 h Desmodesmus subspicatus mg/L EC50	222: 96 h Brachydanio rerio mg/L LC50 semi-static	95: 48 h Daphnia magna mg/L EC50 270: 24 h Daphnia magna mg/L LC50 Static
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	-	3.9: 96 h Oncorhynchus mykiss mg/L LC50 static	7: 24 h Daphnia magna mg/L EC50
2-HYDROXYETHYL METHACRYLATE 868-77-9	-	213 - 242: 96 h Pimephales promelas mg/L LC50 flow-through 227: 96 h Pimephales promelas mg/L LC50	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

<u>Mobility</u>

No information available.

Chemical Name	Partition coefficient
HYDROXYALKYL METHACRYLATE 27813-02-1	0.97
ACRYLIC ACID 79-10-7	0.38 - 0.46
2-HYDROXYETHYL METHACRYLATE 868-77-9	0.47

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

V	Vaste treatment method	<u>s</u>				
0	Disposal of wastes		posal sho ulations.	ould be in accordance with	applicable regional, nation	al and local laws and
C	Contaminated packaging	J Do	not reuse	e container.		
ι	JS EPA Waste Number	No	applicab	le		
Γ	Chemical Name	RCRA		RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Γ	ACRYLIC ACID	-		-	-	U008

enennearraine		Refut Baole for Eloting	Refut B contoo maotoo	
ACRYLIC ACID	-	-	-	U008
79-10-7				
DIMETHYLBENZYL	-	-	-	U096
HYDROPEROXIDE				
80-15-9				

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status	
DIMETHYLBENZYL HYDROPEROXIDE	Toxic	
80-15-9	Ignitable	

14. TRANSPORT INFORMATION

DOT Proper shipping name:	Not regulated
IATA Proper shipping name:	Not regulated
IMDG Proper shipping name:	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Does not comply
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
ACRYLIC ACID - 79-10-7	1.0
DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9	1.0
SACCHARIN - 81-07-2	1.0
SARA 311/312 Hazard Categories	
Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
ACRYLIC ACID	5000 lb	-	RQ 5000 lb final RQ
79-10-7			RQ 2270 kg final RQ
DIMETHYLBENZYL	10 lb	-	RQ 10 lb final RQ
HYDROPEROXIDE			RQ 4.54 kg final RQ
80-15-9			

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ACRYLIC ACID 79-10-7	Х	Х	Х
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	X	х	Х
SACCHARIN 81-07-2	Х	Х	Х
SILVER 7440-22-4	Х	Х	Х
WATER 7732-18-5	-	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	-
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

Revision Date 25-Feb-2015

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The

information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Revision Date 03-Feb-2015

Version 1

SAFETY DATA SHEET

1. IDENTIFICATION		
<u>Product identifier</u> Product Name	21351 REAR WINDOW DEFOGGER TAB ADHESIVE PART 2	
<u>Other means of identification</u> Product Code Synonyms	PTX394319AA None	
Recommended use of the chemical	and restrictions on use	
Recommended Use	Activator	
Uses advised against	No information available	
Details of the supplier of the safety	data sheet	
Manufacturer Address	<u>Distributor</u>	
ITW Permatex	ITW Permatex Canada	
10 Columbus Blvd.	35 Brownridge Road, Unit 1	
Hartford, CT 06106 USA	Halton Hills, ON Canada L7G 0C6	
	Telephone: (800) 924-6994	
Company Phone Number	1-87-Permatex	
	(877) 376-2839	
24 Hour Emergency Phone Number	Chem-Tel: 800-255-3924	
	International Emergency:	
	00+1+ 813-248-0585	
	Contract Number: MIS0003453	

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

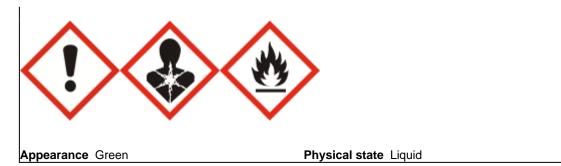
Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 2

Label elements

Danger

Emergency Overview

Harmful if swallowed Causes serious eye irritation May cause drowsiness or dizziness May cause damage to organs through prolonged or repeated exposure Highly flammable liquid and vapor



Odor Alcoholic

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear eye/face protection Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). Copper compounds.

Unknown acute toxicity

2.38% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Trade Secret
2-PROPANOL	67-63-0	60 - 100	*

MINERAL SPIRITS		1 - 5	*	
*The exact perc	entage (concentration) of composition has be	en withheld as a trad	e secret.	
	4. FIRST AID MEASURES	6		
Description of first aid measures				
General advice	Get medical advice/attention if you feel unwell.			
Eye contact	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.			
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician. Wash contaminated clothing before reuse.			
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.			
Ingestion	IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.			
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.			
Most important symptoms and eff	ects, both acute and delayed			
Symptoms	See section 2 for more information.			
Indication of any immediate medic	cal attention and special treatment needed	<u>I</u>		
Note to physicians	Treat symptomatically.			

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2), Dry chemical, Foam

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Flammable. May be ignited by heat, sparks or flames.

Explosion data Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions

Environmental precautions	Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.
Methods and material for containme	ent and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
	7. HANDLING AND STORAGE
Precautions for safe handling	
Advice on safe handling	Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.
Conditions for safe storage, includi	ng any incompatibilities
Storage Conditions	Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
Incompatible materials	Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

	•		
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-PROPANOL	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	
MINERAL SPIRITS	TWA: 100 ppm	TWA: 500 ppm	IDLH: 20000 mg/m ³
8052-41-3		TWA: 2900 mg/m ³	Ceiling: 1800 mg/m ³ 15 min
		(vacated) TWA: 100 ppm	TWA: 350 mg/m ³
		(vacated) TWA: 525 mg/m ³	-

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear protective gloves and protective clothing.

Respiratory protection

Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

General Hygiene Considerations

ns Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	
Appearance	
Odor	
Odor threshold	

Liquid Green Alcoholic No information available

Values

Does not apply

Property Hα Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Relative density Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature **Kinematic viscosity Dynamic viscosity Explosive properties Oxidizing properties Other Information**

Softening point Molecular weight VOC Content (%) Density Bulk density

No information available 82 °C / 180 °F 12 °C / 53 °F 7.7 No information available 12.0% 2.0% 32 mm Hg @ 68°F 2.1 0.79 @ 77°F Soluble in water No information available No information available

No information available

No information available

No information available

No information available

Remarks • Method

Tag Closed Cup Butyl acetate = 1

Air = 1

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Take precautionary measures against static discharges.

96.5

Incompatible materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	May be harmful by inhalation.
Eye contact	May cause redness and tearing of the eyes.
Skin contact	May cause skin irritation and/or dermatitis.
Ingestion	May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-PROPANOL	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
67-63-0			

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No informatio			
Germ cell mutagenicity	No informatio			
Carcinogenicity	The table belo	ow indicates whether each a	gency has listed any ing	redient as a carcinogen.
Chemical Name	ACGIH	IARC	NTP	OSHA
2-PROPANOL	-	Group 1	-	Х
67-63-0				
X - Present	fety and Health Administrat	ion of the US Department of L	,	
Target Organ Effects	Central nervo	us system, Eyes, kidney, Re	spiratory system, Skin.	
Numerical measures of to	oxicity - Product Information	ation		

A I EMIX (oral)	1938 mg/kg
ATEmix (dermal)	4206 mg/kg
ATEmix (inhalation-dust/mist)	75.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known

3.5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-PROPANOL	1000: 96 h Desmodesmus	11130: 96 h Pimephales promelas	13299: 48 h Daphnia magna mg/L
67-63-0	subspicatus mg/L EC50 1000: 72 h	mg/L LC50 static 9640: 96 h	EC50
	Desmodesmus subspicatus mg/L	Pimephales promelas mg/L LC50	
	EC50	flow-through 1400000: 96 h	
		Lepomis macrochirus µg/L LC50	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
2-PROPANOL	0.05
67-63-0	

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated packaging	Do not reuse container.
US EPA Waste Number	D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
2-PROPANOL	Toxic
67-63-0	Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u> Proper shipping name: Hazard Class Packing Group	Isopropyl alcohol, Limited Quantity (LQ) 3 II
IATA UN/ID no Proper shipping name: Hazard Class	ID 8000 Consumer commodity 9
IMDG UN/ID no Proper shipping name: Hazard Class Packing Group EmS-No	UN 1219 Isopropyl alcohol, Limited Quantity (LQ) 3 II F-E, S-D

15. REGULATORY INFORMATION International Inventories Complies TSCA Complies DSL/NDSL Complies EINECS/ELINCS Complies ENCS Complies

IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %		
2-PROPANOL - 67-63-0	1.0		
SARA 311/312 Hazard Categories			
Acute health hazard	Yes		
Chronic Health Hazard	Yes		
Fire hazard	Yes		
Sudden release of pressure hazard	No		
Reactive Hazard	No		

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-PROPANOL 67-63-0	Х	X	Х
MINERAL SPIRITS 8052-41-3	Х	X	Х
ORGANO-COPPER COMPOUND 85737-14-0	Х	-	Х
ORGANO-COPPER COMPOUND 68084-48-0	Х	-	Х
ORGANO-COPPER COMPOUND 22221-10-9	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

NFPA_	Health hazards 2	Flammability 3	Instability 0	-
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

03-Feb-2015 **Revision Date**

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet