

Safety Data Sheet Date Prepared: April 24, 2023

SECTION 1: IDENTIFICATION

1.1. Product Identifier Product Form: Mixture

Product Name: Starbond EM-02 Super-Fast Thin

1.2. Intended Use of the Product Use of the Substance/Mixture: Bonding, finishing, stabilizing, gap-filling.

1.3. Name, Address, and Telephone of the Responsible Party:

Company Manufacturer

CPH International 1450 W. Starbond 1450 W. 228th St.

228th St. Suite 11 Suite 11

Torrance, CA 90005 Torrance, CA 90005 T: 213-382-7788 T: 213-382-7788

T: 1-800-900-4583 (GLUE) T: 1-800-900-4583 (GLUE) <u>www.starbond.com</u> <u>www.starbond.com</u>

1.4. Emergency Telephone Number

Emergency Number: 1-800-900-4583 (GLUE)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture GHS-US Classification

Acute Tox. 4	H332
(Inhalation: dust mist)	H315
Skin Irrit. 2	H319
Eye Irrit. 2	H317
Skin Sens. 1	H351
Carc. 2	H335

STOT SE 3

Full text of hazard classes and H-statements: see

Section 16. 2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):





Signal Word (GHS-US) Warning

Hazard Statements (GHS-US) H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.

Precautionary Statements (GHS-US) P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

Safety Data Sheet

Date Prepared: April 24, 2023

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see Section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

Name	Product Identifier	%
Ethyl 2 Cyanoacrylate	(CAS-No.) 7085-85-0	> 99
Hydroquinone	(CAS-No.) 123-31-9	< 0.2

Full text of H-phrases: see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Harmful if inhaled. Skin sensitization. Suspected of causing cancer.

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. Chronic Symptoms: Suspected of causing cancer

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide, dry chemical.

Safety Data Sheet
Date Prepared: April 24, 2023

Unsuitable Extinguishing Media: Application of water to product may generate heat and increase fire intensity.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen, irritating organic vapors. **Other Information:** Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE). Emergency

Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area.

Methods for Cleaning Up: Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Rapid exothermic polymerization occurs in the presence of water, amines, alkalis and alcohols.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe mist/vapors/spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. **Incompatible Materials:** Water, alcohol, amines, and alkalis.

7.3. Specific End Use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Ethyl 2 cyanoac	rylate (7085-85-0)	_		_		 		
	· · · · · · · · · · · · · · · · · · ·	Τ,						
USA ACGIH	ACGIH TWA (ppm)	0.	2 ppm					

Safety Data Sheet

Date Prepared: April 24, 2023

Hydroquinone	Hydroquinone (123-31-9)				
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³			
USA ACGIH	ACGIH chemical category	dermal sensitizer, Confirmed Animal Carcinogen with Unknown relevance to humans			
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³			
USA IDLH	US IDLH (mg/m³)	50 mg/m ³			
USA OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³			

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when toxic gases may be released.

Personal Protective Equipment : Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory

protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State Liquid

Color Weak yellow transparent

Odor Pungent odor

Melting point / freezing point -30°C

Initial boiling point and boiling range 54-56°C(0.21-0.40kPa)

Decomposition temperatureNo datapHNot applicableKinematic viscosityNo data

Solubility Insoluble in water. Soluble in acetone

n-octanol / water partition coefficient (log value) No data

Vapor pressure <0.27kPa(25°C)
Density and / or relative density 1.00-1.10 g/ml

Relative vapor density 4.3
Particle characteristic No data
Viscosity <5 mPa.s(20°C)

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see Section 7).
- 10.3. Possibility of Hazardous Reactions: Material polymerizes rapidly with contact with water, alcohol, amines, and alkalis.
- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials: Water, alcohol, amines, and alkalis.
- 10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Inhalation, dust, mist: Harmful if inhaled.

Safety Data Sheet
Date Prepared: April 24, 2023

Starbond EM-02 Super-Fast Thin	
ATE (Dust/Mist)	1.52 mg/l/4h
Ethyl cyanoacrylate (7085-85-0)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	< 5.275 mg/l/4h U.S. Environmental Protection Agency December, 2014- converted to 4-hour exposure from 1 hour exposure.
ATE (Dust/Mist)	1.50 mg/l/4h
Hydroquinone (123-31-9)	
LD50 Oral Rat	298 mg/kg
LD50 Dermal Rabbit	74800 mg/kg
IARC group	3
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified **Carcinogenicity:** Suspected of causing cancer.

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva. Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. Chronic Symptoms: Suspected of causing cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hydroquinone (123-31-9)	
LC50 Fish 1	0.044 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	0.29 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	0.044 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
NOEC Chronic Crustacea	0.003 mg/l
NOEC Chronic Algae	0.0015 mg/l

12.2. Persistence and Degradability

Starbond EM-02 Super-Fast Thin	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Starbond EM-02 Super-Fast Thin			
Bioaccumulative Potential Not established.			
Hydroquinone (123-31-9)			
BCF Fish 1 40			
Log Pow	0.5		

12.4. Mobility in Soil

Safety Data Sheet

Date Prepared: April 24, 2023

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name: COMBUSTIBLE LIQUID, N.O.S, (Ethyl cyanoacrylate)

Identification Number: NA1993

Packing Group: III ERG Number: 128

14.2. In Accordance with IMDG

Not regulated for transport

14.3. In Accordance with IATA

Proper Shipping Name: AVIATION REGULATED LIQUID, N.O.S., (Ethyl cyanoacrylate) Packing

Group: III

Identification Number: UN3334 **Hazard Class:** 9 **Label Codes:** 9

ERG Code (IATA): 9A

Ψþ,

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Starbond EM-02 Super-Fast Thin				
SARA Section 311/312 Hazard Classes				
	Immediate (acute) health hazard Delayed			
(chronic) health hazard				
Ethyl cyanoacrylate (7085-85-0)				
Listed on the United States TSCA (Toxic Substances Contro	Act) inventory			
Hydroquinone (123-31-9)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
Listed on the United States SARA Section 302				
Subject to reporting requirements of United States SARA S	section 313			
CERCLA RQ 100 lb				
SARA Section 302 Threshold Planning Quantity (TPQ)	500 - 10000 lb			
ARA Section 313 - Emission Reporting 1 %				

15.2. US State Regulations

15.2. US State Regulations	
Ethyl cyanoacrylate (7085-85-0)	
U.S New Jersey - Right to Know Hazardous Substance List	
Hydroquinone (123-31-9	
U.S Massachusetts - Right to Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard

Safety Data Sheet Date Prepared: April 24, 2023

Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4			
Carc. 2	Carcinogenicity Category 2			
Eye Irrit. 2	Serious eye damage/eye irritation Category 2			
Skin Irrit. 2	Skin corrosion/irritation Category 2			
Skin Sens. 1	Skin sensitization, Category 1			
STOT SE 3	Specific target organ toxicity (single exposure) Category 3			
Н315	Causes skin irritation			
Н317	May cause an allergic skin reaction			
Н319	Causes serious eye irritation			
Н332	Harmful if inhaled			
Н335	May cause respiratory irritation			
Н351	Suspected of causing cancer			

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom



Starbond Instant Set Accelerator (Activator) for CA Super Glue, 6 oz. Aerosol Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 06/17/2022 Date of Issue: 06/29/2022

Section 1: Identification

Product Identifier

Product Form: Mixture **Product Name:** Starbond Instant Set Accelerator (Activator) for CA Super Glue, 6 oz. Aerosol

Intended Use of the Product

Use of the Substance/Mixture: To speed up the drying time of super glues

Name, Address, and Telephone of the Responsible Party

Company
CPH International
1450 W. 228th St. Suite #11,
Torrance, CA 90501
T: 213-382-7788
www.starbond.com

Manufacturer Starbond 1450 W. 228th St. Suite #11, Torrance, CA 90501

T: 213-382-7788

Emergency Telephone Number::

(800) 424-9300 (Chemtrec- US) (703) 527-3887 (International - Call Collect)

Section 2: Hazard(s) Identification

Classification of the Substance or Mixture

GHS Hazards Category

Flammable liquid - Category 2
Eye Irritation - Category 2A
Skin Irritation - Category 2
Respiratory Irritation - Category 3
Specific Target Organ Toxicity - Category 2

Label Elements

GHS-US Labeling Hazard Pictograms (GHS-US):





Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 2: Hazard(s) Identification

Signal Word Hazard State Greents (1) WARNING: Highly Flammable, Irritating to eye and

skin

Harmful, Danger of serious damage to health by prolonged exposure through inhilation Possible risk of harm to unborn child

Harmful: may cause lung damage if swallowed

Precautionary Statements:

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Store in a well-ventilated place. Keep container tightly closed.

Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area. Vapor may cause drowsiness and dizziness.

Response

Inhalation

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

Ingestion

Rinse mouth with clean water immediately.

DO NOT induce vomiting.

Get medical attention immediately.

If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

Skin Contact

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

Eye Contact

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 2: Hazard(s) Identification

Storage

Store in a well-ventilated Place. Keep container tightly closed. Keep cool. Store in a locked cabinet, cage or room.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

CLASSIFICATION (1999/45) XI, F, R11, R36, R66, R67

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Highly flammable. Irritating to eyes and skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. Vapors may cause drowsiness and dizziness.

Section 3: Composition / Information on Ingredients

Name	EC No.	Cas No.	Content %	GHS Classification
Organic Activator	Trade Secret (*)	Trade Secret (*)	0-5%	T, R23/24/25, R33, R52/53, S28A, S36/37, S45, S61
Petroleum Gas, Liquefied, Sweetened	270-705-8	Trade Secret (*)	0-50%	F+, T, R12, R45, S45, S53
Organic Solvent	Trade Secret (*)	Trade Secret (*)	50-100%	XI, F, R11, R36, R66, R67, S16, S26, S9

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15 COMPOSITION COMMENTS

The data shown are in accordance with the latest EC Directives



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 4: First-Aid Measures

Emergency and First Aid Procedures

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention

Note to Physicians: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (i.e., asthma-like conditions), bloodforming system.

Section 5: Fire-Fighting Measures

Extinguishing Media

Alcohol foam, carbon dioxide, dry chemical.

Special Firefighting procedures

Water may be ineffective. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full coverage face piece operated in the positive-pressure demand mode with appropriate turnout gear and chemical resistant personal protective equipment.

Unusual fire and explosion hazards

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Flammable material



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 6: Accidental Release Measures

Personal Precautions

Wear protective clothing as described in Section 8.

Environmental Precautions

Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority

Spill clean up methods

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

Section 7; Handling and Storage

Usage Precautions:

Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level

Storage Precautions:

FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 1200 F

Storage Class:

FLAMMABLE liquid storage

Section 8: Exposure controls / Personal Protection

Notice:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Inhalation health risk and symptoms of exposure:

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, high blood sugar, coma.



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 8: Exposure controls / Personal Protection

Skin and eye contact health risks and symptoms of exposure:

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion health risks and symptoms of exposure:

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Health hazards (acute and chronic):

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Carcinogenocity: NTP Carcinogen: N/A IARCH monographs: N/A

OSHA regulated: N/A

Medical conditions generally aggravated by exposure to this product:

Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

Emergency and First Aid Procedures

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 8: Exposure controls / Personal Protection

Swallowing: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention

Note to Physicians: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (i.e., asthma-like conditions), bloodforming system.

Name	Work Exposure Limits	Remarks	
Organic activator	NAGtGlot :o LLiissttteedd O SHLiAst-Fe	Consult local idn ald Poutbonie accaeu p ut boni eierit es	s xpfosure
Organic solvent	NIOSH: 250 ppm TWA; 590 mg/m3 TWA 2500 ppm IDLH (10% LEL) ACGIH: 500 ppm TWA; 750 ppm STEL OSHA-Final PELs: 1000 ppm TWA; 2400 mg/m3 TWA	Same as above	
Petroleum Gas, Liquefied, Sweetened	ACGIH: Not Listed NIOSH: Not Listed OSHA-Final PELs: N ot Listed	Same as above	













Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 8 : Exposure controls / Personal Protection

P rotective Equipment:

Process conditions: Provide eyewash station.

Engineering Measures: Provide adequate ventilation. Fully equipped spray booth is

r ecommended to ensure the workers legal exposure limits are not exceeded.

R espiratory equipment: Wear respirator with appropriate cartridge for organic solvents and

c hemicals.

Hand protection: Wear approved gloves such as Neoprene, Nitrile or Rubber types

E ye protection: Wear splash-proof goggles

O ther protection: Wear appropriate clothing to prevent any possible skin contact

H ygiene measures: DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift

a nd before eating, drinking or smoking. Promptly remove contaminated clothing.

Section 9: Physical and Chemical Properties

A ppearance : Liquid

C olor : Colorless

O dor : Mild/Sweet Characteristics

B oiling Point : 208 °F
R elative Density : 0.735 g/mL
V apor Density : 3.1 (Air = 1)

F lash Point : 25 °F [Test Method: Closed Cup]
F lammable Limit : NA (Lower %) NA (Upper %)

S olubility Value : (g/100g H2O @ 20oC)

V olatile Organic Compound : 20% from Aerosol Propellant

Section 10: Stability and Reactivity

S tability

C onditions to avoid

I ncompatibility (Materials to avoid)

: Stable : Avoid contact with acids, strong oxidizing agents

H azardous composition or byproducts: May form carbon dioxide and carbon monoxideH azardous polymerization: Will not undergo hazardous polymerization



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 11: Toxicological Information

O rganic activator:

C arcinogenicity: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

R outes of Entry: Absorbed through skin. Dermal contact. Eye contact.

T oxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS O F A 4-HOUR EXPOSURE. Acute toxicity of the vapor (LC50): 1400 mg/m 4 hours [Rat]. 3 C hronic Effects on Humans: Not available.

O ther Toxic Effects on Humans: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

S pecial Remarks on Toxicity to Animals: Not available.

S pecial Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic)

S pecial Remarks on other Toxic Effects on Humans:

A cute Potential Health Effects: Skin: May cause skin irritation. May be harmful if absorbed t hrough skin. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract i rritation. May affect respiration (dyspnea, respiratory stimulation). Harmful if inhaled. I ngestion: May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea. H armful if swallowed. The toxicological properties of this substance have not been fully i nvestigated. Chronic Potential Health Effects: There is a danger of cumulative effects

O rganic solvent:

LD50/LC50: Dermal, guinea pig: LD50 = >9402 uL/kg; Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, eye: 10 uL Mild; Draize test, rabbit, skin: 503 mg/24H Mild; inhalation, mouse: LC50 = 44 gm/m3/4H; Inhalation, rat: LC50 = 50120 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5330 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: In a series of studies, no statistically significant differences in causes of dthinical daboratory results were observed in 948 employees exposed to up to 1070 pr epm organic solven

effects in the offspring of animals exposed to doses which also produced significant maternal toxicity. Reproductive Effects: During the Stewart et al. study, four adult female volunteers were exposed 7.5 hours to vapor at a nominal concentration of 1000 ppm. Three of the four women experienced premature menstrual periods which were attributed to the exposure. Mutagenicity: Sex chromosome loss and nondisjunction(Yeast - Saccharomyces cerevisiae) = 47600 ppm; Cytogenetic analysis(Rodent - hamster Fibroblast)= 40 gm/L. Neurotoxicity: No information found

Petroleum gases, liquefied sweetened (CAS#68476-86-8); mutebook of a process of the stress of the st

p c



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 12: Ecological Information

O rganic activator:

E cotoxicity: Not available. BOD5 and COD: Not available. Products of Biodegradation: Possibly h azardous short term degradation products are not likely. However, long term degradation p roducts may arise. Toxicity of the Products of Biodegradation: The products of degradation a re less toxic than the product itself. Special Remarks on the Products of Biodegradation: Not a vailable

O rganic solvent:

E cotoxicity: Fish: Rainbow trout: 5540 mg/l; 96-hr; LC50Fish: Bluegill/Sunfish: 8300 mg/l; 96-hr; LC50 No data available. Environmental: Volatilizes, leeches, and biodegrades when r eleased to soil. TERRESTRIAL FATE: If released on soil, will both volatilize and leach into the g round. Readily biodegrades and there is evidence suggesting that it biodegrades fairly r apidly in soils. AQUATIC FATE: If released into water, will probably biodegrade. It is readily b iodegradable in screening tests, although data from natural water are lacking. It will also be lost due to volatilization (estimated half-life 20 hr from a model river). Adsorption to s ediment should not be significant. Physical: ATMOSPHERIC FATE: In the atmosphere, will be lost by photolysis and reaction with photo chemically produced hydroxyl radicals. Half-life e stimates from these combined processes are 79 and 13 days in January and June, r espectively, for an overall annual average of 22 days. Therefore considerable dispersion s hould occur. Being miscible in water, wash out by rain should be an important removal p rocess. This process has been confirmed around Lake Shinsei-ko in Japan. There was found in the air and rain as well as the lake

P etroleum gases, liquefied, sweetened (CAS#68476-86-8):

Ecotoxicity - Component Analysis - Ecotoxicity - Aquatic Toxicity No ecotoxicity data are available for this product's components

Section 13 : Disposal Considerations

W aste Treatment Methods

H azardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA a pproved waste facility. Dispose of container and unused contents in accordance with f ederal, state and local requirements. CAS# 99-97-8 DMPT is listed on the TSCA inventory.

I certify that all chemicals in this shipment comply with all applicable rules or orders under T SCA and that I am not offering a chemical substance for entry in violation of TSCA or any a pplicable rule or order under TSCA.



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 14 : Transport Information

AD R/RID PROPER SHIPPING NAME : UN1950 Aerosol

PR IMARY HAZARD CLASS/DIVISION : 2.1
UN /UA Number : UN1950
Pa cking Group
No te: Small Containers LIMITED QUANTITY excep: tlilon.

IMO Proper Shipping Name : UN 1950 AEROSOL

IMO UN class : 2.1 IMO UN class : 1950 IMO Packing Group : II

IMO Label : Flammable Gas

IMO Vessel Stowage : E

IAT A PROPER SHIPPING NAME : UN 1950

UN HAZARD CLASS/DIVISION : 2.1 UN /NA NUMBER : 1950

IAT A PACKING GROUP

IAT A LABEL : FLAMMABLE GAS IAT A STOWAGE : ACCESSIBLE

Sp ecial Precautions for User: AVOID HIGH TEMPERATURES.

GH S Label:



DA NGER CONTENTS UNDER PRESSURE. HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HA RMFUL. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FA TAL IF SWALLOWED AND ENTERS AIRWAYS. HARMFUL TO AQUATIC LIFE. Refer to SDS for add itional information on safe handling / use. - Keep out of reach of children. For Industrial Use Only.

Co ntains: Organic activator, organic solvent, and Sweetened Liquefied Petroleum Gas. This pro duct contains one or more chemicals known to the State of California to cause cancer, bir th defects, and/or other reproductive harm.

Ha zards: H220: Extremely Flammable Gas. H225: Highly flammable liquid and vapour.

H3 19: Causes serious eye irritat ion. H280: Contains gas under pressure, may explode if heated. H340: May cause genetic defects. H301: Toxic if swallowed. H331: Toxic if inhaled. H311: Toxic in contact with skin. H336: May cause drowsiness or dizziness. H373: May cause damage to organs through prolonged or repeated exposure. H412: Harmful to aquatic life with long lasting effects.



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 14: Transport Information

Precautionary Statement(s): P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P280: Wear protective gloves/protective clothing/eye protection/face protection. P240: Ground/bond container and receiving equipment. P271: Use only outdoors or in a well-ventilated area. P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340+312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First Aid: Inhalation - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention.

Eye Contact - If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms occur obtain medical attention.

Ingestion - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention

Section 15: Regulatory Information

H azard

H220: Extremely Flammable Gas.

H225: Highly flammable liquid and vapour.

H280: Contains gas under pressure, may explode if heated.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H336: May cause drowsiness or dizziness.

H340: May cause genetic defects.

H373: May cause damage to organs through prolonged or repeated exposure.

H412: Harmful to aquatic life with long lasting effects.

Pr ecautionary Statement(s):

P2 10: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P4 03+P233: Store in a well-ventilated place. Keep container tightly closed.

P2 80: Wear protective gloves/protective clothing/eye protection/face protection.

P2 40: Ground/bond container and receiving equipment.

P2 71: Use only outdoors or in a well-ventilated area.



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04 /07/2022 Date of Issue: 04/14/2022

Section 15: Regulatory Information

P recautionary Statement(s):

P 303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. R inse skin with water/shower.

P 304+340+312: IF INHALED: Remove victim to fresh air and keep at rest in a position c omfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P 305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact l enses, if present and easy to do. Continue rinsing.

R -Phrases:

R 11: Highly Flammable

R 12: Extremely flammable

R 23/24/25: Toxic by inhalation, in contact with skin and if swallowed

R 33: Danger of cumulative effects

R 36: Irritating to eyes

R 45: May cause cancer

R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the a quatic environment

R 66: Repeated exposure may cause skin dryness or cracking

R 67: Vapors may cause drowsiness and dizziness

S -Phrases:

S 9: Keep container in a well-ventilated place

S 16: Keep away from sources of ignition - No smoking

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical a dvice

S 28A:

After contact with skin, wash immediately with plenty of water

S 36/37: Wear suitable protective clothing and gloves

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the l abel where possible)

S 53: Avoid exposure - obtain special instructions before use

S 61: Avoid release to the environment. Refer to special instructions/safety data sheets

Section 16: Other Information

D isclaimer

A bove information is based on data supplied to us and is believed to be correct. Since the in formation contained herein may be applied under conditions beyond our control and with w hich we may be unfamiliar and since the data made available subsequent to the date hereof m ay suggest modifications of the information, we do not assume responsibility for the results o f its use. This information is furnished upon the condition that the person receiving it shall m ake his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.