Revision Date: 10/23/2019

SAFETY DATA SHEET

1. Identification

Product identifier: MIRANDY GREASE-X SAFETY SOLVENT MOTOR CLEANER & DEGREASER

Other means of identification

SDS number: RE1000025021

Recommended restrictions

Product Use: Cleaner

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: Mirandy Products LLC Address: 1078 GRAND AVE.

S. HEMPSTEAD, NY 11550

Telephone:

Fax:

516-489-6800

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Gases under pressure Compressed gas

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Germ Cell Mutagenicity Category 2
Carcinogenicity Category 1A
Specific Target Organ Toxicity - Category 3¹

Single Exposure

Target Organs

1. Narcotic effect.

Environmental Hazards

Acute hazards to the aquatic Category 3 environment

Label Elements

Hazard Symbol:

Revision Date: 10/23/2019



Signal Word: Danger

Hazard Statement: Contains gas under pressure; may explode if heated.

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing genetic defects.

May cause cancer.

May cause drowsiness or dizziness.

Harmful to aquatic life.

Precautionary Statements

Prevention: Wash thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid

breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Keep container tightly

closed.

Response: IF INHALED: Remove person to fresh air and keep comfortable for

breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water If skin irritation occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this

label). Take off contaminated clothing.

Storage: Protect from sunlight. Store in a well-ventilated place. Store locked up.

Keep container tightly closed.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Ethene, 1,1,2-trichloro-	79-01-6	50 - <100%
2-Propanol	67-63-0	1 - <5%
Carbon dioxide	124-38-9	1 - <5%
Oxirane, 2-(chloromethyl)-	106-89-8	0.1 - <1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Revision Date: 10/23/2019

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Wash contaminated clothing

before reuse. Get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a

protected location. Stop flow of gas. Move containers from fire area if you

can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Revision Date: 10/23/2019

Methods and material for containment and cleaning

up:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and

disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so. Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling: Do not handle until all safe

Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after

handling. Avoid contact with skin.

Conditions for safe storage, including any incompatibilities:

Store locked up. Protect from sunlight. Store in a cool place. Aerosol Level

1

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Lin	nit Values	Source
Ethene, 1,1,2-trichloro-	TWA	10 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	200 ppm	1,080 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	25 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA	100 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	50 ppm	270 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	REL	25 ppm		US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	Ceil_Time	2 ppm		US. NIOSH: Pocket Guide to Chemical Hazards (2016)
2-Propanol	STEL	500 ppm	1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	200 ppm		US. ACGIH Threshold Limit Values (2008)
	PEL	400 ppm	980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	400 ppm	980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	400 ppm	980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	400 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	500 ppm	1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Carbon dioxide	TWA	5,000 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	30,000 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	30,000 ppm	54,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	5,000 ppm	9,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	5,000 ppm	9,000 mg/m3	US. OSHA Table Z-1 Limits for Air

Revision Date: 10/23/2019

				Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	10,000 ppm	18,000	US. OSHA Table Z-1-A (29 CFR 1910.1000)
			mg/m3	(1989)
	STEL	30,000 ppm	54,000	US. OSHA Table Z-1-A (29 CFR 1910.1000)
			mg/m3	(1989)
Oxirane, 2-(chloromethyl)-	TWA	2 ppm	8 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000)
				(1989)
	PEL	5 ppm	19 mg/m3	US. OSHA Table Z-1 Limits for Air
				Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	0.5 ppm		US. ACGIH Threshold Limit Values (2008)

Biological Limit Values

Slological Ellitt Values					
Chemical Identity	Exposure Limit Values	Source			
Ethene, 1,1,2-trichloro- (Trichloroacetic acid: Sampling time: End of shift at end of work week.)	15 mg/l (Urine)	ACGIH BEL (03 2013)			
Ethene, 1,1,2-trichloro- (Trichloroethanol, without hydrolysis: Sampling time: End of shift at end of work week.)	0.5 mg/l (Blood)	ACGIH BEL (03 2013)			
2-Propanol (acetone: Sampling time: End of shift at end of work week.)	40 mg/l (Urine)	ACGIH BEL (03 2013)			

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general

ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels

to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: No data available.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product. Avoid contact with eyes. Wash

contaminated clothing before reuse. Avoid contact with skin.

9. Physical and chemical properties

Revision Date: 10/23/2019

Appearance

Physical state: Gas

Form: Compressed gas Color: No data available. Odor: No data available. **Odor threshold:** No data available. :Ha No data available. Melting point/freezing point: No data available. Initial boiling point and boiling range: No data available. Flash Point: No data available. **Evaporation rate:** No data available. No data available. Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density:No data available.Density:No data available.Relative density:No data available.

Solubility(ies)

Solubility in water:

Solubility (other):

No data available.

No data available.

No data available.

No data available.

Auto-ignition temperature:No data available.Decomposition temperature:No data available.Viscosity:No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: No data available.

Hazardous Decomposition

No data available.

Products:

11. Toxicological information

Revision Date: 10/23/2019

Information on likely routes of exposure

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:

Dermal

Product:

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

Revision Date: 10/23/2019

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Ethene, 1,1,2- Overall evaluation: 1. Carcinogenic to humans.

trichloro-

Oxirane, 2- Overall evaluation: 2A. Probably carcinogenic to humans.

(chloromethyl)-

US. National Toxicology Program (NTP) Report on Carcinogens:

Ethene, 1,1,2- Known To Be Human Carcinogen.

trichloro-

Oxirane, 2- Reasonably Anticipated to be a Human Carcinogen.

(chloromethyl)-

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: Narcotic effect. - Category 3 with narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard

Product: No data available.

Other effects: Central nervous system

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Revision Date: 10/23/2019

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Ethene, 1,1,2-trichloro2-Propanol
Carbon dioxide
Oxirane, 2-(chloromethyl)No data available.
No data available.
No data available.
No data available.

Other adverse effects: Harmful to aquatic organisms.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: No data available.

Revision Date: 10/23/2019

14. Transport information

DOT

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, non-flammable

Transport Hazard Class(es)

Class: 2.2
Label(s): Packing Group: II
Marine Pollutant: No

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated.

IMDG

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, non-flammable

Transport Hazard Class(es)

Class: 2
Label(s): –
EmS No.:

Packing Group: -

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated.

IATA

UN Number: UN 1950

Proper Shipping Name: Aerosols, non-flammable

Transport Hazard Class(es):

Class: 2.2
Label(s):
Packing Group: -

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated. Cargo aircraft only: Forbidden.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

Revision Date: 10/23/2019

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quantity</u>

Ethene, 1,1,2-trichloro-2-Propanol lbs. 100 Oxirane, 2- lbs. 100

(chloromethyl)-

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Sudden Release of Pressure Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

Gases under pressure Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Germ Cell Mutagenicity

Carcinogenicity

Specific Target Organ Toxicity - Single Exposure

Simple asphyxiant

SARA 302 Extremely Hazardous Substance

Reportable

Chemical IdentityquantityThreshold Planning QuantityOxirane, 2-lbs. 100

(chloromethyl)-

SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

Ethene, 1,1,2-trichloro2-Propanol lbs. 100
Oxirane, 2- lbs. 100

(chloromethyl)-

SARA 311/312 Hazardous Chemical

Chemical Identity Threshold Planning Quantity

SARA 313 (TRI Reporting)

Reporting Reporting threshold for manufacturing and

<u>Chemical Identity</u> <u>other users</u> <u>processing</u>

Ethene, 1,1,2-trichloro2-Propanol lbs lbs.
Oxirane, 2- lbs lbs.

(chloromethyl)-

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Ethene, 1,1,2-trichloro- Carcinogenic. 05 2011

Revision Date: 10/23/2019

Ethene, 1,1,2-trichloroEthene, 1,1,2-trichloroDevelopmental toxin. 04 2014

Oxirane, 2-(chloromethyl)- Carcinogenic. 05 2011

Oxirane, 2-(chloromethyl)- Male reproductive toxin. 03 2008

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Ethene, 1,1,2-trichloro-2-Propanol Carbon dioxide Oxirane, 2-(chloromethyl)-

US. Massachusetts RTK - Substance List

Chemical Identity

Ethene, 1,1,2-trichloro-Oxirane, 2-(chloromethyl)-

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Ethene, 1,1,2-trichloro-2-Propanol Carbon dioxide Oxirane, 2-(chloromethyl)-

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Revision Date: 10/23/2019

Inventory Status:

EINECS, ELINCS or NLP: Not in compliance with the inventory.

Canada NDSL Inventory: Not in compliance with the inventory.

Japan Pharmacopoeia Listing: Not in compliance with the inventory.

Australia AICS: On or in compliance with the inventory

Canada DSL Inventory List: On or in compliance with the inventory

Japan (ENCS) List: On or in compliance with the inventory

China Inv. Existing Chemical Substances:

On or in compliance with the inventory

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory

Philippines PICCS: On or in compliance with the inventory

US TSCA Inventory:

On or in compliance with the inventory

New Zealand Inventory of Chemicals:

On or in compliance with the inventory

Japan ISHL Listing: On or in compliance with the inventory

Mexico INSQ: On or in compliance with the inventory

Ontario Inventory: On or in compliance with the inventory

Taiwan Chemical Substance Inventory:

On or in compliance with the inventory

16.Other information, including date of preparation or last revision

Issue Date: 10/23/2019

Revision Information: No data available.

Version #: 1.1

Further Information: No data available.

Disclaimer: This information is provided without warranty. The information is believed to

be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.