SAFETY DATA SHEET

1. Identification

Product identifier: POWERMIGHT POWER SOL INDUSTRIAL HD DEGREASER

Other means of identification
SDS number: RE1000043530

Recommended restrictions
Product Use: Cleaner
Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name:	SIGNAL FLUID SOLUTIONS, INC.
Address:	3403 NIKI WAY RIVERSIDE, CA 92507
Telephone:	951-784-3900
Fax:	

Emergency telephone number: 1-866-836-8855

1-952-852-4646

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 - Single Exposure	Category 3[1.]

Target Organs

1. Narcotic effect.

Environmental Hazards

Acute hazards to the aquatic environment	Category 3

Label Elements

Hazard Symbol:

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%
Carbon dioxide	124-38-9	1 - <5%
2-Propanol	67-63-0	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.

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.
Methods and material for containment and cleaning up:	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.
Notification Procedures:	Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling:	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	Type	Exposure Limit 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)
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 Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	10,000 ppm	18,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	30,000 ppm	54,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
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)
	REL	400 ppm	980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	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)
	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)
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

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.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection	
Hand Protection:	No data available.
Other:	Wear suitable protective clothing. 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

Appearance	
Physical state:	liquid
Form:	Spray Aerosol
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	Not applicable
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	4,826 - 6,205 hPa (20 °C)
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	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 Products: No data available.

11. Toxicological information

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: ATEmix: 131,086.14 mg/kg

Dermal
Product: ATEmix: 156,054.93 mg/kg

Inhalation
Product: ATEmix: 6,242.2 mg/l
ATEmix : 624.22 mg/l

Repeated dose toxicity
Product: No data available.

Specified substance(s):

Ethene, 1,1,2-trichloro-	NOAEL (Rat(Male), Inhalation): 100 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Male), Oral, 52 Weeks): 50 mg/kg Oral Experimental result, Key study
2-Propanol	NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study

Oxirane, 2-(chloromethyl)-	NOAEL (Rat(Female, Male), Oral, 10 - 90 d): 1 mg/kg Oral Experimental result, Key study NOAEL (Mouse, Rat(Female, Male), Inhalation): 5 ppm(m) Inhalation Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

2-Propanol	in vivo (Rabbit): Not Classified Experimental result, Key study
Oxirane, 2-(chloromethyl)-	in vivo (Rabbit): Corrosive Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

2-Propanol	Rabbit, 1 d: Category 2: Causes serious eye irritation Irritating.
Oxirane, 2-(chloromethyl)-	Rabbit, 24 hrs: Corrosive

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Oxirane, 2-(chloromethyl)-	Skin sensitization:, in vivo (Guinea pig): Sensitising

Carcinogenicity

Product: No data available.

Specified substance(s):

Ethene, 1,1,2-trichloro-	Potential cancer hazard.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Ethene, 1,1,2-trichloro-	Overall evaluation: 1. Carcinogenic to humans.
Oxirane, 2-(chloromethyl)-	Overall evaluation: 2A. Probably carcinogenic to humans.

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

Ethene, 1,1,2-trichloro-	Known To Be Human Carcinogen.
Oxirane, 2-(chloromethyl)-	Reasonably Anticipated to be a Human Carcinogen.

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: No data available.

Specified substance(s):
2-Propanol — 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: Narcotic effect.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):

Ethene, 1,1,2-trichloro-	LC 50 (Pimephales promelas, 96 h): 44.1 mg/l Experimental result, Supporting study
2-Propanol	LC 50 (Pimephales promelas, 96 h): 9,640 mg/l Experimental result, Key study
Oxirane, 2-(chloromethyl)-	LC 50 (Pimephales promelas, 96 h): 10.6 mg/l Experimental result, Key study

Aquatic Invertebrates
Product: No data available.

Specified substance(s):

Ethene, 1,1,2-trichloro-	IC 50 (Daphnia magna, 48 h): 20.8 mg/l Experimental result, Key study
2-Propanol	LC 50 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Key study
Oxirane, 2-(chloromethyl)-	EC 50 (Daphnia magna, 48 h): 23.9 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
Ethene, 1,1,2-trichloro- — NOAEL (Jordanella floridae): 5.76 mg/l Experimental result, Key study

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Ethene, 1,1,2-trichloro-	19 % (28 d) Detected in water. Experimental result, Key study
2-Propanol	53 % (5 d) Detected in water. Experimental result, Key study
Oxirane, 2-(chloromethyl)-	18 % (14 d) Detected in water. Experimental result, Key study

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Ethene, 1,1,2-trichloro-	Lepomis macrochirus, Bioconcentration Factor (BCF): 17 Aquatic sediment Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Oxirane, 2-(chloromethyl)-	Log Kow: 0.42 - 0.43 20 °C Experimental result, Supporting study

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

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

14. Transport information

DOT

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, Non-Flammable + 6.1
Transport Hazard Class(es)	
Class:	2.2
Subsidiary Risk	6.1
Label(s):	–
Packing Group:	III
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 + 6.1
Transport Hazard Class(es)	
Class:	2.2
Subsidiary Risk	6.1
EmS No.:	
Packing Group:	III
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

IATA

UN Number:	UN 1950
Proper Shipping Name:	Aerosols, Non-Flammable + 6.1
Transport Hazard Class(es):	
Class:	2.2
Subsidiary Risk	6.1
Packing Group:	III
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

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.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
Ethene, 1,1,2-trichloro-	lbs. 100
2-Propanol	lbs. 100
Oxirane, 2-(chloromethyl)-	lbs. 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard
Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation
Germ Cell Mutagenicity
Carcinogenicity
Specific Target Organ Toxicity - Single Exposure

SARA 302 Extremely Hazardous Substance

Chemical Identity	Reportable quantity	Threshold Planning Quantity
Oxirane, 2-(chloromethyl)-	lbs. 100	lbs. 1000

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
Ethene, 1,1,2-trichloro-	lbs. 100
2-Propanol	lbs. 100
Oxirane, 2-(chloromethyl)-	lbs. 100

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Oxirane, 2-(chloromethyl)-	lbs
Ethene, 1,1,2-trichloro-	10000 lbs
Carbon dioxide	10000 lbs
2-Propanol	10000 lbs

SARA 313 (TRI Reporting)

Chemical Identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
Ethene, 1,1,2-trichloro-	lbs	lbs.
2-Propanol	lbs	lbs.
Oxirane, 2-(chloromethyl)-	lbs	lbs.

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
Ethene, 1,1,2-trichloro-	Male reproductive toxin. 04 2014
Ethene, 1,1,2-trichloro-	Developmental 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-
Carbon dioxide
2-Propanol
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-
Carbon dioxide
2-Propanol
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

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:	03/02/2020
Revision Information:	No data available.
Version #:	1.0
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.