

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name YIELD
 Recommended use Lubricant
Information on Manufacturer
 CHEMSEARCH DIV. OF NCH CORP.
 BOX 152170
 IRVING, TX 75015

Product Code 5068
 Chemical nature Solvent blend
Emergency Telephone Number
 CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER

Extremely flammable
 May be harmful if inhaled
 Causes skin irritation
 Causes eye irritation
 May be harmful if swallowed

Color Amber - Dark amber

Physical State Liquid

Odor Petroleum distillates

Potential Health Effects

Principle Route of Exposure

Inhalation, Skin contact, Eye contact.

Primary Routes of Entry

Inhalation, Skin Absorption.

Acute Effects

Eyes

Causes eye irritation.

Skin

Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Inhalation

May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea, Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

Chronic Toxicity

Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Liver and kidney injuries may occur.

Target Organ Effects

Central nervous system, Cardiovascular system, Respiratory system, Liver, Kidney.

Aggravated Medical Conditions

Respiratory system, Skin disorders, Neurological disorders, Liver disorders, Kidney disorders.

Potential Environmental Effects

See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Butane	106-97-8
Ethyl acetate	141-78-6
Petroleum distillates, hydrotreated light	64742-47-8
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	64742-52-5
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	64742-53-6
Solvent naphtha (petroleum), medium aliphatic	64742-88-7
Sodium sulfonate	68608-26-4
Propane	74-98-6
Petroleum distillate	8052-41-3

4. FIRST AID MEASURES

General Advice Avoid breathing vapors, mist, or gas. Avoid contact with skin, eyes and clothing.
Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
Notes to Physician Aspiration hazard if swallowed - can enter lungs and cause damage.

5. FIRE-FIGHTING MEASURES

Flash Point > 69 °F / > 21 °C
Method Seta closed cup
Autoignition Temperature No information available.
Flammability Limits in Air % Solvent mixture. Upper 11.5 Lower 0.5
Suitable Extinguishing Media Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Specific hazards arising from the chemical Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Flame extension: >24 inches / >61 cm and Burnback: >3 inches / >7.5 cm. Material can create slippery conditions.
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.
Aerosol Level (NFPA 30B) - 3
NFPA Health 2 Flammability 4 Instability 0

HMIS Health 2 Flammability 4 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Keep away from heat and sources of ignition. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing.

Storage Keep away from open flames, hot surfaces and sources of ignition.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Butane	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4); 1000 ppm TWA	No data available	: 800 ppm TWA; 1900 mg/m ³ TWA
Ethyl acetate	: 400 ppm TWA	: 400 ppm TWA; 1400 mg/m ³ TWA	: 2000 ppm IDLH (10% LEL); 400 ppm TWA; 1400 mg/m ³ TWA
Petroleum distillates, hydrotreated light	5 mg/m ³ as oil mist	10 mg/m ³ as oil mist	No data available
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	TWA: 5 mg/m ³ ; STEL: 10 mg/m ³	TWA: 5 mg/m ³	IDLH: 2,500 mg/m ³ ; STEL 10 mg/m ³ ; TWA: 5 mg/m ³
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	5 mg/m ³ as oil mist	10 mg/m ³ as oil mist	No data available
Solvent naphtha (petroleum), medium aliphatic	No data available	No data available	No data available
Sodium sulfonate	No data available	No data available	No data available
Propane	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4); 1000 ppm TWA	: 1000 ppm TWA; 1800 mg/m ³ TWA	2100 ppm IDLH (10% LEL); 1000 ppm TWA; 1800 mg/m ³ TWA
Petroleum distillate	: 100 ppm TWA	: 500 ppm TWA; 2900 mg/m ³ TWA	: 20000 mg/m ³ IDLH; 350 mg/m ³ TWA; 1800 mg/m ³ Ceiling (15 min)

Engineering Measures Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Non viscous
Color	Amber - Dark amber	Odor	Petroleum distillates
Appearance	Transparent	pH	Not applicable
Specific Gravity	0.840	Evaporation Rate	24.5 (Butyl acetate=1)
Percent Volatile (Volume)	74.7	VOC Content (%)	71.1
VOC Content (g/L)	598	Vapor Pressure	1530 mmHg @ 70 °F
Vapor Density	1.7	Solubility	Negligible
Boiling Point/Range	> 160 °F / 71 °C		

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.

Conditions to Avoid Heat, flames, and sparks

Incompatible Products Strong oxidizing agents, Strong acids, Strong bases, Amines, Nitric acid.

Hazardous Decomposition Products Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Sulfur compounds, Hydrogen sulfide and smoke, Aldehydes.

Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Butane	no data available	no data available	658 mg/L (Rat) 4 h	no data available	no data available
Ethyl acetate	5620 mg/kg (Rat)	18000 mg/kg (Rabbit)	no data available	no data available	no data available

		20 mL/kg (Rabbit)			
Petroleum distillates, hydrotreated light	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	5.2 mg/L (Rat) 4 h	no data available	no data available
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.18 mg/L (Rat) 4 h	no data available	no data available
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.18 mg/L (Rat) 4 h	no data available	no data available
Solvent naphtha (petroleum), medium aliphatic	5000 mg/kg (Rat)	3000 mg/kg (Rabbit)	5.28 mg/L (Rat) 4 h	no data available	no data available
Sodium sulfonate	no data available	no data available	no data available	no data available	no data available
Propane	no data available	-	658 mg/L (Rat) 4 h	no data available	no data available
Petroleum distillate	500	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Butane	no data available	no data available	no data available	no data available	CNS
Ethyl acetate	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
Petroleum distillates, hydrotreated light	no data available	no data available	no data available	no data available	CNS, cardiovascular system, respiratory system, liver, kidney
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	no data available	no data available	no data available	no data available	respiratory system
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	no data available	no data available	no data available	no data available	CNS
Solvent naphtha (petroleum), medium aliphatic	no data available	no data available	no data available	no data available	CNS, liver, kidneys
Sodium sulfonate	no data available	no data available	no data available	no data available	no data available
Propane	no data available	no data available	no data available	no data available	CNS
Petroleum distillate	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin, kidneys

Carcinogenicity

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Ethyl acetate	not applicable	not applicable	not applicable	not applicable	not applicable
Petroleum distillates, hydrotreated light	not applicable	not applicable	not applicable	not applicable	not applicable
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	not applicable	not applicable	not applicable	not applicable	not applicable
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	not applicable	not applicable	not applicable	not applicable	not applicable
Solvent naphtha (petroleum), medium aliphatic	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium sulfonate	not applicable	not applicable	not applicable	not applicable	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Petroleum distillate	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information

No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Butane	no data available	no data available	no data available	no data available	2.89
Ethyl acetate	EC50 = 3300 mg/L <i>Desmodesmus subspicatus</i> 48 h	LC50 220-250 mg/L <i>Pimephales promelas</i> 96 h LC50 352-500 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 = 484 mg/L <i>Oncorhynchus mykiss</i> 96 h	EC50 = 1180 mg/L 5 min EC50 = 1500 mg/L 15 min EC50 = 5870 mg/L 15 min EC50 = 7400 mg/L 2 h	= 560 mg/L 48 h	0.6
Petroleum distillates, hydrotreated light	no data available	LC50 = 2.2 mg/L <i>Lepomis macrochirus</i> 96 h LC50 = 2.4 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 = 45 mg/L <i>Pimephales promelas</i> 96 h	no data available	= 4720 mg/L 96 h	N/A
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	no data available	LC50 > 5000 mg/L <i>Oncorhynchus mykiss</i> 96 h	no data available	> 1000 mg/L 48 h	N/A
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	no data available	LC50 > 5000 mg/L <i>Oncorhynchus mykiss</i> 96 h	no data available	> 1000 mg/L 48 h	N/A
Solvent naphtha (petroleum), medium aliphatic	EC50 = 450 mg/L <i>Pseudokirchneriella subcapitata</i> 96 h	LC50 = 800 mg/L <i>Pimephales promelas</i> 96 h	no data available	> 100 mg/L 48 h	N/A
Sodium sulfonate	no data available	no data available	no data available	no data available	N/A
Propane	no data available	no data available	no data available	no data available	2.8
Petroleum distillate	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal

Dispose of in accordance with local regulations.

Container Disposal

Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Consumer Commodity
 Hazard Class ORM-D
 Description Consumer Commodity, ORM-D

TDG

Proper shipping name Consumer Commodity
 Hazard Class ORM-D
 UN-No UN1950
 Description Consumer Commodity, ORM-D

ICAO
 UN-No UN1950
 Proper Shipping Name Aerosols, flammable
 Hazard Class 2.1
 Shipping Description UN1950, Aerosols, flammable, 2.1, LTD QTY

ATA
 UN-No UN1950
 Proper Shipping Name Aerosols, flammable
 Hazard Class 2.1
 ERG Code 126
 Shipping Description UN1950, Aerosols, flammable, 2.1, LTD QTY

MDG/IMO
 Proper Shipping Name Aerosols, flammable
 Hazard Class 2.1
 UN-No UN1950
 EmS No. F-A, S-A
 Shipping Description UN1950, Aerosols, flammable, 2.1, LTD QTY

15. REGULATORY INFORMATION

Inventories
 TSCA Complies
 DSL Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Bulane	Not applicable	Not applicable
Ethyl acetate	Not applicable	Not applicable
Petroleum distillates, hydrotreated light	Not applicable	Not applicable
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	Not applicable	Not applicable
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	Not applicable	Not applicable
Solvent naphtha (petroleum), medium aliphatic	Not applicable	Not applicable
Sodium sulfonate	Not applicable	Not applicable
Propane	Not applicable	Not applicable
Petroleum distillate	Not applicable	Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

A Compressed gases, B2 Flammable liquid, D2B Toxic materials.



16. OTHER INFORMATION

Prepared By Dan Hollas
 Supersedes Date 04/06/2010
 Issuing Date 01/13/2011
 Reason for Revision No information available.
 Glossary No information available.
 List of References. No information available.
 CHEMSEARCH DIV. OF NCH CORP.

assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.