

SAFETY DATA SHEET

Issuing Date No data available

Revision Date 19-Aug-2015

Revision Number 1

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Oil & Grease Concentrate

Product Number 4120 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended use Laboratory Use Only
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name ERA a Waters Company

Supplier Address 16341 Table Mountain Parkway, Golden, CO 80403 USA

Supplier Phone Number303-431-8454Supplier Emailsdsinfo@waters.com

Emergency telephone number

Company Emergency Phone In case of EMERGENCY call CHEMTREC Day or Night

Number Within USA and Canada: 800-424-9300 International Call Collect: +1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

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

| Acute toxicity - Oral | Category 4 |
|--|------------|
| Serious eye damage/eye irritation | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable Liquids | Category 2 |

GHS Label elements, including precautionary statements

Emergency Overview

Signal word Danger

Hazard Statements Harmful if swallowed

Causes serious eye damage

May cause drowsiness or dizziness
Highly flammable liquid and vapor

Appearance Clear, colorless

Physical state Liquid->Liquid

Odor Alcohol

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

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

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ ventilating/ lighting/ equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Precautionary Statements - Response

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Inhalation

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

Ingestion

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

Rinse mouth

Fire

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

Precautionary Statements - Storage

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

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

2% of the mixture consists of ingredient(s) of unknown toxicity

Other information

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

Interactions with Other Chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Note: only the components contributing to the product's GHS hazard classification are listed in this section.

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| Chemical Name | CAS-No | Percent | Trade Secret |
|--------------------|-----------|-----------|--------------|
| n-Propanol | 71-23-8 | 96 - 99.6 | * |
| Light Parrafin Oil | 8012-95-1 | 0.2 - 2 | * |
| Glycerin | 56-81-5 | 0.2 - 2 | * |

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

4. FIRST AID MEASURES

First aid measures

General Advice Seek immediate medical attention/advice. Show this safety data sheet to the doctor in

attendance.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact Get medical attention if irritation develops and persists. Wash off immediately with soap and

plenty of water while removing all contaminated clothes and shoes.

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, Inhalation

(trained personnel should) give oxygen.

INGESTION Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an

unconscious person. DO NOT induce vomiting. Call a physician.

Ensure that medical personnel are aware of the material(s) involved, take precautions to Self-protection of the first aider

protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Burning sensation. Inhalation of high vapor concentrations may cause symptoms like **Effects**

headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient. Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane. Do not use straight streams.

Specific hazards arising from the chemical

Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code Flammable Liquid: I-B

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact Nο Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

All equipment used when handling the product must be grounded. Do not touch or walk

through spilled material. Stop leak if you can do it without risk.

Other Information

Environmental precautions

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth,

sand or other non-combustible material and transfer to containers.

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material. Soak up with inert absorbent

material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local

exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance

with local regulations.

Incompatible Products Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------------------|--|---|---|
| n-Propanol 71-23-8 | TWA: 100 ppm | TWA: 200 ppm TWA: 500 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 500 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 625 mg/m³ | IDLH: 800 ppm TWA: 200 ppm TWA: 500 mg/m³ STEL: 250 ppm STEL: 625 mg/m³ |
| Light Parrafin Oil 8012-95-1 | TWA: 5 mg/m³ inhalable fraction excluding metal working fluids, highly & severely refined TWA: 5 mg/m³ inhalable fraction excluding metal working fluids | TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³ | IDLH: 2500 mg/m³ TWA: 5 mg/m³ STEL: 10 mg/m³ |
| Glycerin 56-81-5 | - | TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, | |

Alcohol

respirable fraction

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Showers

> **Eyewash stations** Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves. Antistatic boots.

Respiratory protection

Hygiene Measures

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

None known

None known

Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

| Physical state | Liquid->Liquid | |
|----------------|------------------|------|
| Appearance | Clear, colorless | Odor |

Color No information available **Odor Threshold** No information available

| <u>Property</u> | <u>Values_</u> | Remarks Method |
|-------------------------------|----------------------------|----------------|
| pH | | None known |
| Melting / freezing point | No data available | None known |
| Boiling point / boiling range | | None known |
| Flash Point | No data available C / 72 F | None known |
| Evaporation Rate | No data available | None known |

No data available

Flammability (solid, gas) Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit Vapor pressure No data available

Vapor density No data available None known **Specific Gravity** 8.0 None known Water Solubility Soluble in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water None known

Autoignition temperature No data available None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known Dynamic viscosity None known

Explosive properties No data available **Oxidizing properties** No data available

Other Information

Softening Point No data available **Particle Size** No data available

Particle Size Distribution

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. May cause drowsiness and dizziness.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye

damage. (based on components). Severely irritating to eyes. May cause irreversible

damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea,

vomiting and diarrhea. Harmful if swallowed. (based on components).

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------------------------|---------------------|-----------------------|-----------------------|
| n-Propanol 71-23-8 | = 1870 mg/kg (Rat) | = 4049 mg/kg (Rabbit) | > 13548 ppm (Rat) 4 h |
| Light Parrafin Oil 8012-95-1 | > 24 g/kg (Rat) | - | = 2062 ppm (Rat) 4 h |
| Glycerin 56-81-5 | = 12600 mg/kg (Rat) | > 10 g/kg(Rabbit) | > 570 mg/m³(Rat) 1 h |

Information on toxicological effects

Symptoms Erythema (skin redness). May cause blindness. Burning. Inhalation of high vapor

concentrations may cause symptoms like headache, dizziness, tiredness, nausea and

vomiting.

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

Sensitization No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------|-------|---------|-----|------|
| Light Parrafin Oil | A2 | Group 1 | | X |
| 8012-95-1 | | Group 3 | | |

ACGIH (American Conference of Governmental Industrial Hygienists)

A4 - Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity
STOT - single exposure
No information available.
No information available.

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STOT - repeated exposure No information available.

Chronic Toxicity No known effect based on information supplied. Contains a known or suspected

carcinogen.

Target Organ Effects Eyes.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

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

ATEmix (oral)

1,878.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|---------------|-------------------|------------------------|-------------------------------|-------------------------------|
| n-Propanol | | 96h LC50: = 4480 mg/L | | 48h EC50: = 3642 mg/L 48h |
| 71-23-8 | | (Pimephales promelas) | | EC50: 3339 - 3977 mg/L |
| Glycerin | | 96h LC50: 51 - 57 mL/L | | 24h EC50: > 500 mg/L |
| 56-81-5 | | (Oncorhynchus mykiss) | | |

Persistence and Degradability

No information available.

Bioaccumulation

| Chemical Name | Log Pow |
|-----------------------|-------------|
| n-Propanol 71-23-8 | 0.25 - 0.34 |
| Glycerin 56-81-5 | -1.76 |

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methodsThis material, as supplied, is a hazardous waste according to federal regulations (40 CFR)

261).

Contaminated Packaging Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number D001

California Hazardous Waste Codes 331

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

| Chemical Name | California Hazardous Waste |
|---------------|----------------------------|
| n-Propanol | Toxic |
| 71-23-8 | Ignitable |

14. TRANSPORT INFORMATION

<u>DOT</u>

UN-No. UN1274
Proper Shipping Name N-PROPANOL

Hazard Class 3
Packing Group ||

Description UN1274, N-PROPANOL, 3, II

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Revision Date 19-Aug-2015

Emergency Response Guide 129 Number **TDG** UN-No. UN1274 **Proper Shipping Name** N-PROPANOL **Hazard Class Packing Group** Description UN1274, N-PROPANOL, 3, II **MEX** UN-No. UN1274 **Proper Shipping Name** N-PROPANOL **Hazard Class** 3 **Packing Group** Ш Description UN1274, N-PROPANOL, 3, II ICAO UN-No. UN1274 **Proper Shipping Name** N-PROPANOL **Hazard Class Packing Group** Description UN1274, N-PROPANOL, 3, II IATA UN-No. UN1274 N-PROPANOL **Proper Shipping Name Hazard Class** 3 **Packing Group** Ш Description UN1274, N-PROPANOL, 3, II **IMDG** UN1274 UN-No. **Proper Shipping Name** N-PROPANOL **Hazard Class** 3 **Packing Group** Ш EmS-No. F-E. S-D UN1274, N-PROPANOL, 3, II, (22°C C.C.) Description <u>RID</u> UN-No. UN1274 **Proper Shipping Name** N-PROPANOL **Hazard Class** 3 **Packing Group** Ш Classification code Description UN1274, N-PROPANOL, 3, II ADR UN1274 UN-No. **Proper Shipping Name** N-PROPANOL **Hazard Class** 3 **Packing Group** Ш Classification code F1 **Tunnel restriction code** (D/E) Description UN1274, N-PROPANOL, 3, II **ADN** UN1274 UN-No.

UN-No. UN1274
Proper Shipping Name N-PROPANOL

Hazard Class 3
Packing Group || Classification code F1

Description UN1274, N-PROPANOL, 3, II

Hazard Labels3Limited Quantity1 LVentilationVE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

IECSC -

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US 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 Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

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

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

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International Regulations

Mexico

National occupational exposure limits

| Component | Carcinogen Status | Exposure Limits |
|-----------------------|-------------------|------------------------------------|
| n-Propanol | | Mexico: TWA 200 ppm |
| 71-23-8 (96 - 99.6) | | Mexico: TWA 500 mg/m ³ |
| | | Mexico: STEL 250 ppm |
| | | Mexico: STEL 625 mg/m ³ |
| Light Parrafin Oil | | Mexico: TWA 5 mg/m ³ |
| 8012-95-1 (0.2 - 2) | | Mexico: STEL 10 mg/m ³ |
| Glycerin | | Mexico: TWA 10 mg/m ³ |
| 56-81-5 (0.2 - 2) | | |

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

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NFPA Health Hazards 3 Flammability 3 Instability 0 Physical and

HMIS Health Hazards 3 Flammability 3 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

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19-Aug-2015

Revision Note No information available

Disclaimer

Revision Date

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

End of Safety Data Sheet