SAFETY DATA SHEET



1. Identification

Product identifier Other means

of identification

SDS number Recommended

METALWORKING FLUID

Recommended restrictions None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

RelaDyne, LLC Company name

8280 Montgomery Road, Suite 101

RelaTECH Semi Synthetic Coolant 380

Cincinnati, OH 45236

888-830-3156 www.reladyne.com

Not applicable

Telephone (General

Information)

Emergency telephone

number

Emergency telephone number (outside USA)

INFOTRAC 800-535-5053

2. Hazard(s) identification Not classified

Serious eye damage/eye irritation Category 1 Physical hazard Sensitization, skin Category 1 **Health hazards**

Not classified **Environmental hazards** Not classified **OSHA** defined hazards



WARNING! Signal word

Hazard statement Causes serious eye irritation. May cause an allergic skin reaction.

Precautionary statement

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present Response

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON

SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical

Advice or attention. IF INHALED: Remove to fresh air and keep at rest in a position comfortable

breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Take off contaminated clothing and wash

Dispose of contents/container in accordance with local/regional/national/international regulations.

before reuse. Collect spillage.

Store in a well ventilated place. Keep container tightly closed. Protect from sunlight. Store away **Storage**

from incompatible materials. Store in accordance with local/regional/national/international

regulation.

Disposal Hazard(s) not otherwise

classified (HNOC)

None known

None Supplemental information

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3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SEVERELY-HYDROTREATED		64742-52-5	10-20
NAPHTHENIC PETROLEUM			
DIETHYLENE GLYCOL MONOBUTYL ETHER		112-34-5	1-5
HEXAHYDRO-1,3,5-TRIS (2-HYDROXETHYL)-S-TRIAZINE		4719-04-4	1-5

Other components below reportable levels

4. First-aid measures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Under normal conditions of

intended use, this material is not expected to be an inhalation hazard.

Skin contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing

and shoes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing

before reuse.

Eye contact

Ingestion

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse mouth thoroughly. Do not give liquids. Never give anything by mouth to a victim who is

unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and

delayed

vision.

Indication of immediate

medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

General information

If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Foam. Dry chemicals. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing

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

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment Wear suitable protective equipment. and precautions for firefighters

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret

Methods and materials for containment and cleaning up

Local authorities should be advised if significant spillages cannot be contained.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Clean up in accordance with all applicable regulations. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

To maintain product quality, do not store in heat or direct sunlight. Store in original tightly closed container. Room temperature - normal conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep this material away from food, drink and animal feed. Do not allow material to freeze. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

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8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

	Туре	Value	
SEVERELY-HYDROTREAT ED NAPHTHENIC PETROLEUM (CAS 64742-52-5)	PEL	5 mg/m3	
U.S NIOSH			
	Туре	Value	
SEVERELY-HYDROTREAT ED NAPHTHENIC PETROLEUM (CAS 64742-52-5)	STEL	10 mg/m3	
	TWA	5 mg/m3	
ACGIH			
	Туре	Value	
DIETHYLENE GLYCOL MONOBUTYL ETHER (CAS 112-34-5)	TWA	10 PPM	

Appropriate engineering controls

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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is

recommended.

Skin protection

Hand protection Use protective gloves made of: Nitrile.

Other Wear suitable protective clothing and gloves.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

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General hygiene considerations

When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Clear Physical state Liquid **Form** Liquid

Color **PETROLEUM** Odor **Odor threshold** Not available. рΗ 9.3-9.8 Typical Melting point/freezing point < 32 °F (< 0 °C)

Initial boiling point and boiling

range

> 212 °F (> 100 °C)

Amber

Flash point Not applicable

Evaporation rate Like water when diluted

Flammability (solid, gas) Not applicable Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available

Flammability limit - upper

(%)

Not available

Explosive limit - lower (%) Not available Explosive limit - upper (%) Not available Not available Vapor pressure Vapor density Not available Relative density Not available

Solubility(ies) 100 % Water Miscible

Partition coefficient

(n-octanol/water)

Not available

Auto-ignition temperature Not available Decomposition temperature Not available Not available

Other information

Viscosity

9.1 @ 5% pH in aqueous solution Specific gravity 1.01 13 % VOC ASTM D2369

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use. Hazardous polymerization does not

occur.

Conditions to avoid Heat, flames and sparks. Temperatures exceeding the flash point. Contact with incompatible

materials.

Incompatible materials

Hazardous decomposition

Avoid contact with oxidizers or reducing agents. Smoke, fumes, and oxides of carbon

products

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful. May be harmful if swallowed and enters airways. Skin contact May be irritating to the skin. Frequent or prolonged contact may defat and dry the skin, leading to

discomfort and dermatitis.

Eye contact Causes serious eye irritation. Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision.

Information on toxicological effects

Expected to be a low hazard for usual industrial or commercial handling by trained personnel. Acute toxicity

Test Results Components **Species**

SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM (CAS 64742-52-5)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

Inhalation

LC50 Rat 5.7 mg/l, 4 hours

Oral

LD50 Rat > 5000 mg/kg

DIETHYLENE GLYCOL MONOBUTYL ETHER (CAS 112-34-5

Dermal

LD 50 Rabbit 2700 mg/kg Guinea Pig Oral 2000 mg/kg

3-IODO-2-PROPYNYL BUTYLCARBAMATE (CAS 55406-53-6)

Dermal

LD50 Rabbit >2000 mg/kg

Oral

LD50 Rat 1.1 g/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Defatting, drying and cracking of skin.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

sensitization This product is not expected to cause skin sensitization. Skin

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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^{*} Estimates for product may be based on additional component data not shown.

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

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary

injury or death.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species **Test Results**

SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM (CAS 64742-52-5)

Aquatic

Acute

Fish LC50 Fish > 100 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Consult authorities before disposal. Do not contaminate ponds, waterways or ditches with

chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Hazardous waste code

Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Do not re-use empty containers.

14. Transport information

DOT

Not regulated as dangerous goods. Not regulated by D.O.T.

IATA

Not regulated as dangerous goods. Not regulated by D.O.T.

IMDG

Not regulated as dangerous goods. Not regulated by D.O.T.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

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^{*} Estimates for product may be based on additional component data not shown.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. It may be reportable under the provisions of SARA Sections 311 and 312 if specific threshold criteria are met or exceeded.

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

HEXAHYDRO-1,3,5-TRIS (2-HYDROXYTHYL)-S-TRIAZINE (CAS 4719-04-4) 1.0% One time export notification only

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

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

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

> Delayed Hazard -Fire Hazard -No Pressure Hazard -No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

DIETHYLENE GLYCOL MONOBUTYL ETHER CAS 112-34-5 1-5 % BY WEIGHT 3-IODO-2-PROPYNYL BUTYLCARBAMATE CAS 55406-53-6 0.1-1.0% BY WEIGHT

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Not regulated. **FDA**

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. Massachusetts RTK - Substance List

Not regulated.

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

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

California South Coast Air This product is subject to SCAQMD Rule 1144; it is compliant and may be sold and used in the SCAQMD. The VOC content of the product is 73 g/L, measured by ASTM Method E-1868-10. This **Quality Management** product has a specified use dilution VOC limit of 75 g/L, the maximum dilution concentration is 100 District (SCAQMD) Rule

% to maintain compliance. 1144 (VOC Emissions)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region Inventory name On inventory or exempt (yes/no)* Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No

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United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

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

Issue date 04-25-2016

Revision date

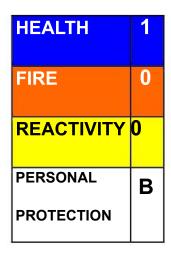
Version # 01

Further information

Label requirements WARNING!

CAUSES EYE AND SKIN IRRITATION

MAY CAUSE RESPIRATORY TRACT IRRITATION



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDS's under 29 CFR 1910.1200, the preparer may choose to provide them.

Disclaimer

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 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.

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