

**RelaTECH Non-Zinc Hydraulic Oil 32, 46, 68**

**1. Identification**

**Product identifier**                      **RelaTECH Non-Zinc Hydraulic Oil 32, 46, 68**  
**Other means of identification**      Product Code: 951470032NZ  
**Recommended use**                      Metalworking Fluid, Forming Oil, Stamping Oil, Drawing Oil

**Recommended restrictions**          None known.  
**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**  
**Manufactured For:**                      RelaDyne LLC  
**Address:**                                      8280 Montgomery Road,  
    Suite 101  
    Cincinnati, OH 45236  
**Contact :**                                      Customer Service  
**Telephone:**                                  888-830-3156  
**E-mail:**                                        sales@reladyne.com  
**Emergency Contacts**                      INFOTRAC 800-535-5053

**2. Hazard(s) identification**

**Physical hazards**                          Not classified.  
**Health hazards**                              Aspiration hazard                              Category 1  
**Environmental hazards**                  Not classified.  
**OSHA defined hazards**                  Not classified.

**Label elements**



**Signal word**                                  Danger  
**Hazard statement**                          Not available.  
**Prevention**                                    Do not breathe gas/mist/vapors/spray.  
**Response**                                      IF exposed or concerned: Get medical advice/attention.  
**Storage**                                        Store in accordance with local/regional/national/international regulation.  
**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. See section 13 of this SDS for disposal instructions.  
**Hazard(s) not otherwise classified (HNOC)**      None known.  
**Supplemental information**                  None.

**3. Composition/information on ingredients**

**Substances**

| Chemical name  | Common name and synonyms | CAS number | %   |
|--|--------------------------|------------|-----|
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>NAPHTHENIC |                          | 64742-52-5 | >49 |

**Composition comments**                      A complex combination of petroleum oil and additives

## 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Move to fresh air. Oxygen or artificial respiration if needed. IF exposed or concerned: Get medical advice/attention.  |
| <b>Skin contact</b>   | Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If skin irritation or an allergic skin reaction develops, get medical attention. |
| <b>Eye contact</b>  | Flush thoroughly with water. If irritation occurs, get medical assistance.   |
| <b>Ingestion</b>  | Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a poison control center immediately.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Defatting of the skin.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.   |
| <b>General information</b>  | Contact physician if discomfort continues.   |

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Halon. Dry chemicals. Foam. Carbon dioxide (CO <sub>2</sub> ). Water spray or fog. Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | No unusual fire or explosion hazards noted.  |
| <b>Special protective equipment and precautions for firefighters</b> | Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.   |
| <b>Fire-fighting equipment/instructions</b>                          | Cool containers exposed to flames with water until well after the fire is out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Use pressurized air mask if product is involved in a fire. |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted. Flammability Class: Combustible III B  |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.  |
| <b>Methods and materials for containment and cleaning up</b>               | <p>Large Spills: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth or absorbent material then place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.</p> |
| <b>Environmental precautions</b>   | Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewer, basements or confined areas. Avoid discharge to the aquatic environment. Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center.  |

## 7. Handling and storage

|   |   |
|---|---|
| <b>Precautions for safe handling</b>                                | DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands after handling and before eating. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. All handling to take place in well-ventilated area. Shower after work. Remove and wash contaminated clothing promptly. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Store locked up. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Use care in handling/storage.  |

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components  | Type | Value   | Form  |
|---|------|---------|-------|
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5) | PEL  | 5 mg/m3 | Mist. |

#### US. ACGIH Threshold Limit Values

| Material  | Type | Value   | Form                |
|---|------|---------|---------------------|
| Petroleum Oil   | TWA  | 5 mg/m3 | Inhalable fraction. |
| Components  | Type | Value   | Form                |
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5) | TWA  | 5 mg/m3 | Inhalable fraction. |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Material  | Type | Value    | Form  |
|---|------|----------|-------|
| Petroleum Oil   | STEL | 10 mg/m3 | Mist. |
|   | TWA  | 5 mg/m3  | Mist. |
| Components  | Type | Value    | Form  |
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5) | STEL | 10 mg/m3 | Mist. |
|   | TWA  | 5 mg/m3  | Mist. |

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Adequate ventilation should be provided whenever the material is heated or mists are generated. 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.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Goggles/face shield are recommended.

#### Hand protection

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

#### Other

Chemical/oil resistant clothing is recommended. Launder contaminated clothing before reuse.

#### Respiratory protection

Under normal conditions, respirator is not normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

#### Thermal hazards

Not available.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## 9. Physical and chemical properties

### Appearance

#### boiling range

#### Physical state

Clear and bright liquid

#### Form

Liquid

#### Color

Amber

### Odor

Mild Petroleum Odor

### Odor threshold

Not Available

### pH

Not applicable.

### Melting point/freezing point

< -30°F (-34.44°C) ASTM D 5949/ ISO 3016

### Initial boiling point and

> 490 °F (> 254.44 °C) ASTM D 2887/ ISO 3294

|   |  |
|---|--|
| <b>Flash point</b>                                  | >= 325.0 °F (>= 162.8 °C) Cleveland Open Cup ASTM D 92/ ISO 2592 |
| <b>Evaporation rate</b>                             | Not available.   |
| <b>Flammability (solid, gas)</b>                    | Not available.   |
| <b>Upper/lower flammability or explosive limits</b> |  |
| <b>Flammability limit - lower (%)</b>               | Not available.   |
| <b>Flammability limit - upper (%)</b>               | Not available.   |
| <b>Explosive limit - lower (%)</b>                  | Not available.   |
| <b>Explosive limit - upper (%)</b>                  | Not available.   |
| <b>Vapor pressure</b>                               | Not available.   |
| <b>Vapor density</b>                                | Not available.   |
| <b>Relative density</b>                             | Not available.   |
| <b>Relative density temperature</b>                 | 60 °F (15.56 °C) ASTM D 4052/ ISO 12185                          |
| <b>Solubility(ies)</b>                              |  |
| <b>Solubility (water)</b>                           | Not available.   |
| <b>Partition coefficient (n-octanol/water)</b>      | Not established.   |
| <b>Auto-ignition temperature</b>                    | > 600 °F (> 315.56 °C) ASTM E 659                                |
| <b>Decomposition temperature</b>                    | Not available.   |
| <b>Viscosity</b>                                    | 32 cSt (104 °F (40 °C) ASTM D 445/ ISO 3104)                     |

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport                     |
| <b>Chemical stability</b>                 | Stable.  |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.   |
| <b>Conditions to avoid</b>                | Heat, flames and sparks. Avoid temperatures exceeding the flash point.   |
| <b>Incompatible materials</b>             | Strong oxidizing agents.   |
| <b>Hazardous decomposition products</b>   | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |

## 11. Toxicological information

### Information on likely routes of exposure

|   |  |
|---|--|
| <b>Ingestion</b>  | May cause gastrointestinal discomfort if swallowed. Do not induce vomiting. Vomiting may increase risk of product aspiration. May be fatal if swallowed and enters airways |
| <b>Inhalation</b>   | May be fatal if swallowed and enters airways.  |
| <b>Skin contact</b>   | Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis   |
| <b>Eye contact</b>  | May be irritating to eyes.   |
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Defatting of the skin. Coughing. Shortness of breath. Discomfort in the chest.   |

### Information on toxicological effects

|  |   |
|--|---|
| <b>Acute toxicity</b>                    | Not classified.   |
| <b>Skin corrosion/irritation</b>         | Not classified. May be irritating to the skin.  |
| <b>Serious eye damage/eye irritation</b> | Not classified. May cause minor irritation on eye contact.  |
| <b>Respiratory or skin sensitization</b> |   |
| <b>Respiratory Sensitization</b>         | Not classified.   |
| <b>Skin sensitization</b>                | Not classified. May cause defatting of the skin, but is neither an irritant nor a sensitizer.   |
| <b>Germ cell mutagenicity</b>            | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  |
| <b>Carcinogenicity</b>                   | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Nota L - Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. Not classified. |

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

Not listed.

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | Contains no ingredient listed as toxic to reproduction |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.  |
| <b>Aspiration hazard</b>                                  | May be fatal if swallowed and enters airways.          |
| <b>Chronic effects</b>                                    | Prolonged inhalation may be harmful.                   |
| <b>Further information</b>                                | Risk of chemical pneumonia after aspiration.           |

## 12. Ecological information

|                                      |  |
|--------------------------------------|--|
| <b>Ecotoxicity</b>                   | Not expected to be harmful to aquatic organisms.   |
| <b>Persistence and degradability</b> | Not inherently biodegradable.  |
| <b>Bioaccumulative potential</b>     | Bioaccumulation is unlikely to be significant because of the low water solubility of this product.   |
| <b>Mobility in soil</b>              | Not available.   |
| <b>Other adverse effects</b>         | 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

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. |
| <b>Hazardous waste code</b>                  | Not applicable.   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.   |
| <b>Contaminated packaging</b>                | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.   |

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available.

## 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

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

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

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

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

|                          |   |
|--------------------------|---|
| <b>Hazard categories</b> | Immediate Hazard - Yes<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No |
|--------------------------|---|

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes**SARA 313 (TRI reporting)**  
Not regulated.**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 (SDWA)** Not regulated.**US state regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. 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.

**US. Massachusetts RTK - Substance List**

Not regulated.

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

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

Not Listed.

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

|                   |            |
|-------------------|------------|
| <b>Issue date</b> | 05-12-2015 |
| <b>Version #</b>  | 02         |

**References**

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
Chemical Abstracts Service Registry Handbook  
CRC: Handbook of Chemistry and Physics  
ILO Safety Cards  
International Labour Organization  
International Maritime Organization Marine Pollutants List  
NFPA Hazardous Chemical Data Sheets  
NIOSH Pocket Guide  
Registry of Toxic Effects of Chemical Substances (RTECS)  
US DOT Hazardous Materials Regulations

**Disclaimer**

This Safety Data Sheet is prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. The information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

**Revision Information**

GHS: Listing