SAFETY DATA SHEET
NATIONAL 150 REFRIGERANT OIL

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier

Product name: NATIONAL 150 REFRIGERANT OIL
EC Number: 265-155-0
REACH Registration Number: Registration date not expired or substance has not been registered,
CAS Number: 64742-52-5
Index Number: 649-465-00-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Refrigeration compressor lubricant.
Advised Against: No specific use advised against.

1.3. Details of the supplier of the safety data sheet

Company name: National Refrigerants Ltd.
4 Watling Close
Sketchley Meadows Business Park
Hinckley LE10 3EZ
Tel: +44(0)1455 630790
Fax: +44(0) 1455 630791
Email: sds@nationalref.com

1.4. Emergency telephone number

Emergency Tel: +44(0) 1865 407333

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance of mixture


2.2. Label elements


2.3. Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Hazardous Ingredients:

3.2 Mixtures

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<th>EINECS</th>
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<th>CHIP Classification</th>
<th>CLP Classification</th>
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<td>64742-52-5</td>
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</table>
SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Skin contact: Wash skin thoroughly with water. Launder contaminated clothing. If skin irritation persists or a rash develops as a result of excessive contact see a doctor.

Eye contact: Flush eyes immediately with fresh water for several minutes while holding the eyelids open. If irritation persists see a doctor.

Ingestion: If swallowed, and person is conscious, give water or milk. DO NOT make person vomit except on advice of medical personnel. If advice cannot be obtained take person and container label to the nearest emergency treatment centres. Never give anything by mouth to an unconscious person.

Inhalation: If respiratory irritation or any signs of symptoms described in this MSDS occur, move the person to fresh air. If any of these effects continue see a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Warning Statements: OIL MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT.

Skin contact: Expected to cause no more than minor skin irritation. Prolonged or frequent repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from defatting action of this material.

Eye contact: Expected to cause no more than minor eye irritation.

Ingestion: If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhoea may occur.

Inhalation: Breathing vapour or mist at concentrations in air that exceed the ACGIH TLV can cause respiratory irritation or discomfort.

Delayed/immediate effects: The base oil components are not expected to be carcinogenic bases on IARC criteria. This product has not been tested as a whole for chronic health effects. See Section 11 for additional information.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate/special treatment: None applicable.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: According to the US National Fire Protection Association Guide use water spray, dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited use water spray to disperse the vapours and to provide protection for personnel attempting to stop the leak.

5.2. Special hazards arising from the substance or mixture

Special hazards arising from the mixture: Combustion and break-down products can be toxic.

5.3. Advice for fire-fighters

Advice for fire-fighters: For fires involving this material do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency. Ammonia fumes may be released.

SECTION 6: ACCIDENTAL RELEASE MEASURES
6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear oil resistant footwear and gloves. See Section 8.

6.2. Environmental precautions

Environmental precautions: Prevent contamination of ground water and surface water.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Stop the source of the leak or release and contain spill if possible, ventilate the area. Use respiratory protection and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up additional liquid with additional absorbent and place in a disposable container. Dispose at a registered hazardous waste disposal site.

6.4. Reference to other sections

Reference to other sections: See Section 8 for personal precautions.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling requirements: Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimised. Water contamination should be avoided.

Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool dry place. Keep container closed and drum bungs in place.

Suitable packaging: Store in original packaging only.

7.3. Specific end use(s)

Specific end use(s) No data available.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

8.2. Exposure controls

Respiratory protection: Respiratory protection is normally not required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standards use an approved respirator is recommended. Wear approved respirator protection such as toxic dust, mist and fume respirator. Use approved air respiratory protection for cleaning large spills or upon entry into tanks, vessels or other confined spaces.

Eye protection: Avoid eye contact. The wearing of chemical safety goggles or face shield is recommended.

Skin protection: Exposed employees should exercise reasonable personal cleanliness; this includes cleansing of exposed skin several times daily with soap and water, laundering or dry cleaning soiled work clothing at least daily.
Ventilation: Use adequate ventilation to keep the airborne concentrations of this material below the ACGIH TLV for mineral oil mists. Local exhaust ventilation and/or enclosure of the process is preferred in these cases.

Exposure Limits: The ACGIH TLV for mineral oil mists is 5 mg/m³ for a daily 8-hour exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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<th>Value</th>
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<tbody>
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<td>Clear amber liquid</td>
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<tr>
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<tr>
<td>Flash Point</td>
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<tr>
<td>Vapour pressure</td>
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SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Stable at normal storage conditions and temperatures.

10.2. Chemical stability

Chemical stability: Hazardous polymerization does not occur.

10.3. Possibility of hazardous reactions

Hazardous reactions: Under normal use and storage no hazardous reactions have been determined.

10.4. Conditions to avoid

Conditions to avoid: Strong oxidizers such as chlorates, nitrates, peroxides etc.

10.5. Incompatible material

Materials to avoid: Strong oxidizers such as chlorates, nitrates, peroxides etc.

10.6. Hazardous decomposition products

Hazardous decomposition products: On combustion carbon monoxide, carbon dioxide, and aldehydes and ketones may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Relevant effects for mixture:

General

This product contains petroleum base oils which may be refined by various processes including sever solvent extraction, hydrocracking and hydro treating. These oils have not been
listed in the US National Toxicology Program (NTP) Annual Report nor have they been
classified by the International Agency for Research on Cancer (IARC) as carcinogenic or
probably carcinogenic to humans.

Some low naphthenic oils have caused skin irritation and skin tumours in laboratory animals
when repeatedly applied and left in place between applications. The significance of this effect
to humans has not been established. Brief or intermittent contact is not expected to cause
adverse effects if it is washed thoroughly. Avoid prolonged or repeated skin contact.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

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12.2. Persistence and degradability

Persistence and degradability:

12.3. Bio accumulative potential

Bio-accumulative potential: No data available

12.4. Mobility in soil

Mobility: No data available

12.5. Results of PBT and vPvB assessment

PBT identification: No data available

12.6. Other adverse effects

Other adverse effects: This material may present environmental risks common to oil spills. Contact your local oil spill response group and applicable government agencies if a spill occurs.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal operations: Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

Recovery Operations: Stop the source of the leak or release and contain spill if possible, ventilate the area. Use respirator and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up additional liquid with additional absorbent and place in a disposable container. Dispose at a registered hazardous waste disposal site.

Disposal of packaging: Dispose of packaging at a registered hazardous waste site. Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat.

N.B.

SECTION 14. TRANSPORT INFORMATION

14.1. ADR

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SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environment regulations/legislation specific for the substance or mixture

In the absence of local approval authorities/standards follow US NIOSH/MSHA, UK BSI regulations. Respirators must meet either the above or local standard for approved respirators.

15.2. Chemical Safety Assessment

16. OTHER INFORMATION

Other information:

* Indicates text in SDS which has changed since the last revision.

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