Version 1.1

Issue Date 9 May 2012 Revision Date: 1 Dec. 2014



SAFETY DATA SHEET **MINERAL OIL WF68**

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

1.1. Product Identifier

Product name: MINERAL OIL WF68

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

Use: Compressor Oil

Advised Against: No identified 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

Telephone Number: +44(0)1455 630790 Fax Number: +44(0)1455 630791 Email: sds@nationalref.com

1.4. Emergency telephone number

Emergency Telephone: +44(0)1865 407333

Opening hours: 24 Hour. Other comments: English only.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification under Directive Not classified as hazardous under Directive 67/548/EEC and 199/45/EC.

67/548/EEC and 1999/45/EC:

2.2. Label elements

Directives 67/458/EEC or

1999/45/EC: None. **Label elements under Directive** None. 67/458/EEC and 1999/45/EC:

Risk phrases

None, Safety phrases None.

2.3. Other hazards

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Ingredients:

3.2 Mixtures

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*DISTILLATES (PETROLEUM) HYDROTREATED HEAVY NAPHTHENIC

BIGHTED (I E HI GEEGIN) ITT BITGHTED HEAT TOTAL THILE HIG				
EINECS	CAS	67/548/EEC Classification	CLP Classification	%
265-155-0	64742-52-5	-	-	70 - 100

^{*}In accordance with the Directive 94/69/EC (21st ATP to DSD), Nota L, reference IP 346/92: DMSO Extraction Method" the supplier has determined that the base oils used in this preparation are not carcinogenic.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Skin contact: No specific first aid measures are required. As a precaution, remove clothing and shoes if

contaminated, discard clothing and shoes, or thoroughly clean contaminated clothing and

shoes before reuse. To remove material from skin use soap and water.

Eye contact: No specific first aid measures are required. As a precaution remove contact lenses, if worn,

and flush eye with water.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution get

medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air,

move the exposed person to fresh air. Get medical attention if coughing or respiratory

discomfort occurs.

4. 2. Most important symptoms and effects, both acute and delayed

Skin contact: Contact with skin not expected to be harmful.

Eye contact: Not expected to cause prolonged or significant eye irritation.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-bases mineral oil. May cause

respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit (See section 8).

Symptoms of respiratory irritation may include coughing and difficulty breathing.

Delayed/immediate effects: Not classified.

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

Immediate/special treatment: None

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Foam, dry powder, Carbon dioxide, water fog.

5.2. Special hazards arising from the substance or mixture

Special hazards arising from

the mixture:

A complex mixture of airborne solids, liquids and gases including carbon dioxide and unidentified organic compounds will be produced when this material undergoes combustion.

5.3. Advice for fire-fighters

Advice for fire-fighters:

This material will burn although it is not easily ignited. For fires involving this material do not

enter any enclosed or confined fire space without self-contained breathing apparatus and

proper protective equipment.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: *Eliminate all sources of ignition in vicinity of spilled material. Refer to Sections 5 and 8 for

more information

6.2. Environmental precautions

Environmental precautions: *Stop the source of the release if you can do it without risk. Contain the release to prevent

further contamination of soil, surface water or groundwater.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: *Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal

Protection. Use appropriate techniques such as applying non-combustible absorbent material or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements.

Report spills to local authorities as appropriate or required.

6.4. Reference to other sections

Reference to other sections: See Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling requirements: *Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Do not taste or

swallow.

7.2. Conditions for safe storage, including any incompatibilities

*General handling information: *Avoid contaminating soil or releasing this material into sewage and drainage systems and

bodies of water.

*Static Hazard: *Electrostatic charge may accumulate and create a hazardous condition when handling this

material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient by themselves. Review all operations which have potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere and use appropriate

mitigating procedures.

Container warning: Container is not designed is not designed to contain pressure. Do not use pressure to empty

container or it may rupture with explosive force. Empty containers retain produce residue (solid, liquid and/or vapour) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose the containers to heat, flame, sparks, static electricity, or any other source of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returner to a drum reconditioner or disposed

of properly.

7.3. Specific end use(s)

Specific end use(s) Compressor oil.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

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*No applicable occupational limits exist for this material or its components. Consult local authorities for appropriate values.

Derived No Effect Level:

No data available.

Predicted No Effect concentration

No data available.

8.2. Exposure controls

Engineering measures: Use in a well ventilated area.

Respiratory protection: No respiratory protection is normally required. If user operations generate an oil mist,

determine if airborne concentrations are below the occupational exposure limit for mineral oil mist (Section 8.1). If not wear an approved respirator to provide adequate protection from the

mist.

Hand protection: No hand protection is normally required. As a precaution nitrile rubber gloves can be used.

Eye protection: No special eye protection is normally required. Where splashing is possible wear safety

glasses with side shields.

Skin protection: No special protective clothing is normally required.

Environmental: Avoid contaminating soil or releasing this material into sewage and drainage systems and

bodies of water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

State: Liquid.

Colour: Colourless or yellow.
Odour: Petroleum odour.
*Odour Threshold: No data available
*pH: Not applicable
*Freezing point: Not applicable

*Initial boiling point: > 315°C

*Flashpoint: 165°C (Cleveland Open Cup)

*Evaporation rate: No data available

*Flammability (solid, gas): No data available

*Flammability (explosive) Limits (% volume in air): Upper: Not applicable

*Vapour pressure: <0.01 mm Hg at 37.8°C (100°F)

*Vapour density (Air = 1) >1

*Liquid Density: 0.906 – 0.919 kg/l

*Solubility: Soluble in hydrocarbons; insoluble in water.

*Partition coefficient: n- No data available octanol/water:

*Auto-ignition temperature:

*Decomposition temperature:

Viscosity (Kinematic):

*Explosive properties:

*Oxidising properties:

No data available

28.8 – 110 cSt at 40°C

No data available

No data available

9.2 Other Information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: *This material is not expected to react.

10.2. Chemical stability

Chemical stability: Chemically stable under normal ambient and anticipated storage and handling conditions of

temperature and pressure.

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10.3. Possibility of hazardous reactions

Hazardous reactions: This material is considered stable under normal ambient and anticipated storage and handling

conditions of temperature and pressure.

10.4. Conditions to avoid

Conditions to avoid: *Not applicable

10.5. Incompatible material

May react with strong acids or strong oxidizing agents such as chlorates, nitrates, peroxides

etc.

10.6. Hazardous decomposition products

Hazardous decomposition

products

On combustion a complex mixture of airborne solids, liquids and gases including carbon

dioxide and unidentified organic compounds will be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity: Oral toxicity: No data available.

Inhalation toxicity: No data available.

Dermal toxicity: No data available.

Irritation: Skin irritation: No data available.

Eye irritation: No data available.

Sensitisation: No data available.

Repeated dose toxicity: No data available.

Carcinogenic assessment: The base oils used in this preparation are not carcinogenic.

*In accordance with the Directive 94/69/EC (21st ATP to DSD), Nota L, reference IP 346/92: DMSO Extraction Method" the supplier has determined that the base oils used in this

preparation are not carcinogenic.

Mutagenic assessment: No data available.

Toxicity to reproduction: No data available.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to fish:This material is not expected to be harmful to aquatic organisms. The product has not been

tested. The statement has been derived from the properties of the individual components.

Toxicity to Aquatic plants: This material is not expected to be harmful to aquatic organisms. The product has not been

tested. The statement has been derived from the properties of the individual components.

Acute Toxicity to aquatic

plants:

This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

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Ecotoxic values: No data available.

12.2. Persistence and degradability

Persistence and degradability: This material is not expected to be readily biodegradable. The product has not been tested.

The statement has been derived from the properties of the individual components.

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: *This product is not, or does not contain a substance that is a potential PBT or a vPvB.

12.6. Other adverse effects

Other adverse effects: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal operations:

Use material for its intended purpose or recycle if possible. Oil collection services are available

for used oil recycling or disposal. Place contaminated material in containers and dispose of in a manner consistent with applicable regulations. Contact your supplier or local environmental

authorities for approved disposal or recycling methods.

In accordance with European Waste Catalogue (E.W.C.) the codification is the following:

13 02 05.

Disposal of packaging: Dispose packaging at a registered waste collection site.

N.B. *The user's attention is drawn to the possible existence of regional or national regulations

regarding disposal.

SECTION 14. TRANSPORT INFORMATION

14.1. ADR

Not Classified.

14.2. IMDG

Not classified.

SECTION 15. REGULATORY INFORMATION

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

*REGULATORY LISTS SEARCHED:

01=EU. Directive 76/769/EEC: Restrictions on the marketing and use of certain dangerous

substances.

02=EU Directive 90/394/EEC: Carcinogens at work.

03=EU Directive 92/85/EEC: Pregnant or breastfeeding workers.

04=EU Directive 96/82/EC (Seveso II): Article 9.

05=EU Directive 96/82/EC (Seveso II): Articles 6 and 7.

06=EU Directive 98/24/EC: Chemical agents at work.

07=EU Directive 2004/37/EC: On the protection of workers.

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08=EU Regulation EC No. 689/2008; Annex 1. Part 1. 09=EU Regulation EC No. 689/2008: Annex 1, Part 2. 10=EU Regulation EC No. 689/2008: Annex 1, Part 3.

11=EU Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs).

12=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous

substances, mixture & article.

13=EU REACH, Annex XIV: Candidate List of Substances of Very High Concern for

Authorization (SVHC).

14=Germany: Technical Guidelines for the Prevention of Air Pollution (TA-luft).

15=Germany, TRGS 907 16=Germany, TRGS 905

*The following components of this material are found on the regulatory lists indicated. Distillates (petroleum), hydro treated heavy naphthenic 02, 03, 06

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out by the supplier of this mixture.

16. OTHER INFORMATION

Other information:

Revision statement: *Key literature references &

sources of data:

This safety sheet is prepared in accordance with EU Regulation 1907/2006 and Commission Regulation (EU) No. 453/2010.

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

Various sources of data have been used in the compilation of this SDS, they include but are not exclusive to:

Chevron Safety Data Sheet Capella WF68, MSDS 15200, Revision No. 3 Date: February 14,

2012.

European Chemical Substances Information System (ESIS), Internet: http://esis.irc.ec.europa.eu/ European Chemical Agency (ECHA) Information on Registered Substances, Internet:

http://echa.europa.eu/information-on-chemicals/registered-substances

TOXNET Database on toxicology, hazardous chemicals, environmental health, and toxic releases, U.S. National Library of Medicine (NLM), Internet: http://toxnet.nlm.nih.gov.

Hazardous substances information system of the German Federation of Institutions for Statutory

Accident Insurance and Prevention (GESTIS) Internet: http://www.dguv.de/ifa/de/gestis/stoffdb/index.jsp

Full text of H-statements and Rphrases:

None

Abbreviations that may have been used in this document:

TLV: Threshold Limit Value STEL: Short-term Exposure Limit

NQ: Not Quantifiable

TWA: Time Weighted Average. PEL: Permissible Exposure Limit CAS: Chemical Abstract Service Number

Legal disclaimer: National Refrigerants Ltd. believes that the information and recommendations contained herein (including data and statements) are accurate at the time of preparation. No warranty is made concerning the accuracy and no liability shall be made for claims for use or reliance of the recommendations contained herein.