

 INDUSTRIJA NAFTE, d.d.	SAFETY DATA SHEET	Edition: 2/11/07
	Product: INA Fungia ISO VG 32, 46, 68, 100	Page: 1 / 5

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

Product name and code:	INA Fungia 1000148 - 1000150 and 2000138, 2000140, 2000142
Product use:	Lubricating oil for piston and rotary cooling compressors.
Producer/supplier:	INA-INDUSTRIJA NAFTE d.d.
Address:	Av. Većeslava Holjevca 10, P.O.B. 555, 10002 Zagreb, CROATIA Phone 00-385 1 64 50 842 / 385 1 64 51 075 (0 – 24 h) Fax 00-385 1 64 52 050
Emergency Service Telephone Number:	112

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance:		Preparation:	X		
Chemical name of substance:	-				
CAS No.:	-				
Chemical composition of preparation (concentration / range)	Naphthene-based mineral oil without additives.				
EEC Index:	-				
Components contributing to product hazardousness:					
Component	% v/v (concentration)	EINECS/CAS	Hazard symbol	Risk phrases	Safety phrases
					-

Polycyclic aromatics in mineral oil: <3% (DSMO extract, IP 346)

3. HAZARDS IDENTIFICATION

The most important hazards and effects:	
Human health hazards:	Long-term or recurring exposure may have irritating effect on skin/eyes of oversensitive persons.
Environmental hazards:	No data. Avoid releasing into environment.
Physical and chemical hazards:	See items 9 and 10.
Special hazards:	No data.
Main symptoms of effects:	
Inhalation:	Hot oil vapours may have irritating effect on respiratory tracts.
Skin:	In sensitive persons, may cause redness, dryness and/or dermatitis.
Eyes:	In sensitive persons, may cause redness and prickling.
Ingestion:	No data, but laxative effect possible.
Overview of special conditions:	None.

4. FIRST-AID MEASURES

First-aid procedures:	
Inhalation:	Take the person to fresh air. In case of breathing difficulties, seek medical assistance.
Skin contact:	Thoroughly rinse with running water and soap.
Eye contact:	With clean fingers keep eye-lids apart and rinse with running water for at least 15 minutes.
Ingestion:	DO NOT invoke vomiting! Rinse the mouth with water and spit out.
Note to first-aiders/physician:	See items 2 and 3.

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5. FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable:	Foam, dry chemical powder, CO ₂ , sand.
Not suitable:	Water.
Fire-fighting measures for special hazards:	No special recommendations.
Special fire-fighting measures:	Use water spray for cooling containers/tanks and for protection of persons.
Fire-fighting special safety equipment:	Self-sustaining compressed-air breathing apparatus (HRN EN 135) and thermally insulated suit.
Special exposure hazards:	None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal safety equipment from item 8. Stand upwind in respect of releasing point.
Environmental precautions:	Prevent discharging/spilling into water, sewage and drainage systems by digging a protective trench and/or fencing with dry sand, earth, or similar absorbent material. Spills on water surface shall be surrounded with floating booms.
Methods for cleaning-up and recovery:	Spilled product shall be collected by means of adsorbent or inert material. Waste material and removed contaminated surface soil layer shall be put into well-closed tanks, and until disposal, stored in well-vented rooms. Deliver for disposal to legal entities entrusted with hazardous waste disposal, authorised by the Ministry in charge of environmental protection.
Additional warnings:	In case of major spills, notify the communication unit by dialling 112.

7. HANDLING AND STORAGE

Handling:	
Safety precautions:	Use the product in vented rooms. Keep far from heat and ignition sources.
Safe handling advice:	Avoid contact with skin and eyes.
Storage: technical measures and storage conditions:	
Suitable:	Cooling compressor oil recommended storage is in roofed or closed areas. Recommended storage temperature: 5-40°C.
To be avoided:	Exposure to direct sunlight and high temperatures, contact with water and strong oxidants.
Packaging materials:	
Recommended:	Original manufacturer's packaging.
Not suitable:	All other.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Technical measures for reducing exposure:	Provide good venting / air outlet in work areas.
Control parameters:	

Hazardous substance	Maximum allowed concentration ppm	Biological limit values ppm
Mineral oils, aerosols	5 U (total dust) mg/m ³	No data

Personal protective equipment:

Respiratory tract protection:	During regular work activities, no equipment is required for protection of respiratory tracts. In special cases (e.g. spilling), use safety mask for the whole face (HRN EN 136), and in case of fire – self-sustaining compressed-air breathing apparatus (HRN EN 135).
Hand protection:	PVC or neoprene gloves: oil-, grease-, lye-, and acid-resistant (HRN EN 374-1).
Eye protection:	Safety goggles with side guards, or safety vizier.
Skin and body protection:	Protective clothes and footwear.
Special hygienic and safety precautions:	Smoking, eating, and drinking are prohibited during handling this product. Wash hands after each interruption of work.

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Additional warnings:	Immediately take-off the contaminated clothes and footwear.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical properties

State:	liquid	Colour:	yellow	Odour:	mild
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Chemical properties

Characteristics	Unit	Values	Method	Note
pH value:				Not applicable
Boiling point / Boiling range:	°C			No data
Flash point:	°C	≥ 175	HRN EN ISO 2592	
Flammability:	°C			Not applicable
Auto-ignition temperature:	°C	330	DIN 51794	
Explosive properties:	% v/v			Non-explosive product
Oxidizing properties:				Not applicable
Vapour pressure:	kPa			Not applicable
Density (15°C):	kg/m ³	893 - 908	HRN EN ISO 12185	
Solubility in water:	g/L			No data
Solubility in organic solvents or oils:	g/L			Not applicable
Partition coefficient n-octanol / water:	- log Low			Not applicable
Pour point, maximum	°C	- 21	HRN ISO 3016	
Viscosity (at 100°C):				
INA Fungia 32		28.8 – 35.2		
INA Fungia 46	mm ² /s	41.4 – 50.6	HRN EN ISO 3104	
INA Fungia 68		61.2 – 74.8		
INA Fungia 100		90 – 100		
Vapour density:	kg/m ³			Not applicable
Volatility:	kPa			Not applicable
Miscibility with other substances:				Not applicable
Conductivity:	pS/m			Not applicable
Melting point / Melting range:	°C			Not applicable
Gas group:				Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under regular conditions.
Conditions to avoid:	High temperature and direct sunlight.
Materials to avoid:	Contact with water and strong oxidants.
Hazardous decomposition products:	No formation of hazardous products expected during regular storage.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	
Oral (LD ₅₀):	No data.
Inhalation (LD ₅₀):	No data.
Dermal (LD ₅₀):	No data.
Local effects:	
Skin irritation:	No data.
Eye irritation:	No data.

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Dermal sensitivity:	No data.
Chronic poisoning or long exposure:	In sensitive persons, may have irritating effect on skin and/or eyes, and cause dermatitis and/or redness.
Exposure effects:	
Single-term:	No data.
Recurrent:	No data.
Long-term:	See: Chronic poisoning or long exposure.
Momentary effects:	No data.
Delayed:	No data.
Special:	No data.

12. ECOLOGICAL INFORMATION

Mobility:	
Known or predicted distribution to environmental compartments:	Floats on water surface.
Surface tension:	No data.
Soil absorption/desorption:	No data.
Other physical and chemical properties:	See item 9.
Persistence/degradability:	
Biotic or abiotic degradation:	No data.
Aerobic or anaerobic degradation:	No data.
Persistence:	No data.
Bio-accumulation:	
Bio-accumulative potential:	No data.
Bio-enhancement:	No data.
Possible environmental impact:	
Water:	No data.
Air:	No data.
Soil:	No data.
Eco-toxicity:	
For aquatic organisms (EC 50):	No data.
For algae (EC 50):	No data.
For ground organisms:	No data.
For plants and land animals:	No data.
Other harmful effects:	No data.

13. DISPOSAL CONSIDERATIONS

Preferred disposal considerations:	
Waste from residues:	Waste oil is hazardous waste and it should not be spilled/discharged into sewerage or environment. Residues should be thermally treated. See item 6.
Contaminated packaging:	To be disposed of into oily waste containers, pursuant to the current legislation. Drums may be regenerated.
Local disposal considerations based on:	Regulations on Waste Oil Management (OG 124/06); Regulations on Types of Waste (OG 27/96); Law on Waste (OG 178/04, OG 111/06); Decree on Change and Amendment to the Law on Waste (OG 153/05); Decree on Hazardous Waste Management Requirements (OG 32/98); Decree on Categories, Types, and Classification of Waste with Catalogue of Waste and Hazardous Waste List (OG 50/05).

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14. TRANSPORT INFORMATION

Transport classification signs:	
Road (ADR):	Not classified as product hazardous for transportation.
Rail (RID):	Not classified as product hazardous for transportation.
Water (ADNR):	Not classified as product hazardous for transportation.
Sea (IMDG):	Not classified as product hazardous for transportation.
Air (IATA –ICAO):	No data on transportation.
UN classification number:	-
Additional regulations:	Law on Transportation of Hazardous Substances (OG 79/07).
Special precautions and conditions:	

15. REGULATORY INFORMATION

Applicable regulations:	Law on Chemicals (OG 150/05); INA N 12-246.
Information on hazards and safety measures:	
Hazard symbol:	-
Risk phrases: (for final product)	-
Safety phrases: (for final product)	S 2 Keep out of the reach of children. S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

Risk phrases: (for ingredients)	-
Safety phrases: (for ingredients)	-
Literature:	1. http://ecb.jrc.it/esis/
Revisions:	Edition 2 in respect of edition 1 of this SDS is a completely new edition meeting the requirements of Regulations on the Manner of Filling-out the Safety Data Sheet, OG 111/2006, and EU Directive 2001/58/EC.
Note:	Safety Data Sheet (SDS) is drawn up on the basis of present knowledge and legislation in force at the moment of launching the product onto the market. Product is described on the basis of its safety data. The use of product for purposes other than those indicated above, as well as its use with other materials during treatment process may cause hazards that are not described in this SDS.