

## Material Safety Data Sheet

### Rotoil SH 200

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: Rotoil SH200 lubricant oil for rotary vacuum pump  
Chemical family: Petroleum hydrocarbon  
CAS Number: 64742-65-0  
EC index number: 649-474-00-6  
EINECS/ELINCS: 265-169-7  
Formula:  $(CH_2)_n$ ;  $20 \leq n \leq 40$   
Synonyms: None  
Use: General purpose mechanical pump fluid

Supplier: Galileo TP Process Equipment S.r.l.  
Via del Pantano 73, 50018 Scandicci (Firenze) - Italy  
Tel. +39 055 7221358  
info@galileotp.com

Manufacturer: Inland Vacuum Industries  
35 Howard Ave, Churchville NY 14428 - U.S.A.

Emergency telephone number:  
CENTRO ANTIVELENI OSPEDALE NIGUARDA - Milano - Italy  
+39 02 66 10 10 29

## 2. HAZARDS IDENTIFICATION

Classification according to Regulation EC 1272/2008 (CLP)  
 Meets requirements of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP346 (Annex VI, paragraph 1.1.3.1, Note L).

Classification according to Directives 67/548/EEC (substances) or 1999/45/EC (mixtures)  
 Not requested

Label elements according to Regulation EC 1272/2008 (CLP)  
 Not requested

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 Not requested

Please see Toxicological information.

- INHALATION:** Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. Inhalation of oil mist or vapors at elevated temperature may cause respiratory irritation.
- SKIN CONTACT:** Repeated or prolonged skin contact may cause dermatitis and defatting.
- EYE CONTACT:** Expected to be minor eye irritant
- INGESTION:** Not expected to be acutely toxic.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance	EC index number	EC number	CAS	Concentration	Classification
Severely Hydro treated Paraffinic Hydrocarbons	649-474-00-6	265-169-7	64742-65-0	100% (w/w)	T, R45, S45, S53; Carc. 1B, H350, P201, P202, P281, P308+P313, P405, P501 H, L

If EC index number does not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, or the registration date has not yet come due. See Other information for full text of statements.

#### 4. FIRST AID MEASURES

- INHALATION:** Seek immediately medical attention.  
Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen.
- SKIN CONTACT:** Flush with large amounts of water. Use soap if possible. Remove severely contaminated clothing and wash before reuse. If irritation persists seek medical attention.
- EYE CONTACT:** Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.
- INGESTION:** Seek medical attention.  
If swallowed, DO NOT induce vomiting.

Most important symptoms and effects, both acute and delayed  
Please see Toxicological information.

#### 5. FIRE FIGHTING MEASURES

- Flash point (Method): >213 °C (Cleveland Open Cup)
- Lower flammable limit (vol. %): No data available
- Upper flammable limit (vol. %): No data available
- Switching on temperature: No data available
- Fire and explosion hazards: Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.
- Extinguishing media: Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), foam.
- Special fire fighting procedures: Avoid breathing smoke and vapor. Use water spray to keep fire-exposed containers cool.
- Special personal protection: Breathing apparatus with full facepiece and full protective equipment.

#### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Use breathing apparatus and protect body against contact with vapor or liquid.  
Evacuate and isolate hazard area.  
Eliminate ignition sources like heat, flames, sparks, electrical apparatus.  
Eliminate incompatible materials.
- Environmental precautions: If possible and without risk, stop flow.  
Avoid accumulation, avoid entrance in sewers, basements, excavations and everywhere cumulus is a risk factor.
- Environment reclamation: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Take up small spills with absorbent pads. Large spills may be taken up with pump or vacuum.

## 7. HANDLING AND STORAGE

Avoid unnecessary exposure, comply with regulations covering personal and environmental security like (non exhaustive examples) REACH regulation.

Personal protection:	Protect eyes, face and skin from liquid sprinkle, do not breathe vapors.
Handling:	Employ material for strictly necessary time, providing to safe storage immediately after the use. Do not remove or deface labels, read them before use and understand properties and hazard of product. Ensure other equipment are electrically grounded, explosion-proof, adequate for use with material, pressure and temperature of exercise. Keep away from flames, sparkle, electrostatic charges, heat and ignition sources. Ensure container from physical damage like drag, roll, slide, drop, perforation. Keep atmospheric pressure under control. Keep ambient temperature under control. No smoking, eating, drinking. Remove contaminated clothing and protective equipment before entering eating areas, avoid contamination of other personnel or object.
Storage:	Observe all regulations and local requirements regarding storage of containers. Store in cool well ventilated, purpose build compound, protect from extremes of weather, check periodically. Keep temperature between 0 °C and 50 °C. Don't store with oxidizing gases or other oxidizing agents, explosives, flammable materials, organic peroxides. Keep away from flames, sparkles, electrostatic charges, heat and ignition sources. Ensure the container from falling, overturning, strokes, dragging. No smoking, eating, drinking.
Special use:	Inspection of container has to be carried out dressing personal protection equipments.

## 8. EXPOSURE CONTROL, PERSONAL PROTECTION

Exposure limit:	Oil mist ACGIH TLV TWA 5mg/m <sup>3</sup> 8 hours ACGIH STEL 10 mg/m <sup>3</sup> OSHA PEL TWA 5 mg/m <sup>3</sup> 8 hours
Exposure control:	Material-compatible ventilation system at source of vapor, employ material for strictly necessary time. Don't eat, drink, smoke during employment or in presence of material. Provide eye wash fountain and breathing apparatus nearby.
Personal protection:	RESPIRATION - Proper apparatus to employment condition. HANDS - Chemical resistant, impervious insulated gloves (PVA, neoprene, butyl rubber). EYES - Avoid contact lenses. Use safety goggles with side screens. SKIN - Impervious clothing. HEAD - Proper apparatus to employment condition. FOOTS - Safety shoes with toe and heel steel anti shock.
Applicable law:	Consult local authorities for acceptable exposure limits and best practices.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pale yellow viscous liquid.
Odour:	Faint petroleum odour.
Odour threshold:	No data available.
pH:	No data available.
Melting point:	No data available.
Boiling point:	112 °C / 233.6 °F
Flash point:	>213 °C
Evaporation rate:	Not appreciable.
Flammability:	Not flammable.
Lower explosive limit (vol. %):	Not applicable.
Upper explosive limit (vol. %):	Not applicable.
Vapour pressure at 25 °C:	<0.0001 torr
Vapour density:	~14
Specific gravity:	0.87
Water solubility:	Not appreciable.
Partition coefficient n-octanol/water:	No data available.
Autoignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	55 cst @ 40 °C
Explosive properties:	No data available.
Oxidising properties:	No data available.
Critical temperature:	No data available.
Other:	Can move along ground to large and/or distant areas and cumulate in closed spaces at ground or sub ground level.

## 10. STABILITY AND REACTIVITY

Stability and reactivity: Stable under normal temperatures and pressures.  
 Conditions to avoid: Temperature above 200 °C.  
 Incompatible materials: Oxidizing gases or other oxidizing agents.  
 Hazardous decomposition product: Carbon monoxide, carbon dioxide.

## 11. Toxicological information

Toxicity data:

<i>Result</i>	<i>Species</i>	<i>Dose</i>	<i>Score</i>
LD50 oral	Rat	>2000 mg/kg	
LD50 dermal	Rabbit	>2000 mg/kg	
LC50 inhalation	Rat	>5 mg/l	
Eye irritation	Rabbit		6<Draize<15

Acute exposure: IHNALATION - Vapors may be irritating.  
 SKIN, EYE - May be irritant.  
 INGESTION - May be irritant.

Chronic exposure: Meets requirements of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP346 (EC 1272/2008 Annex VI, paragraph 1.1.3.1, Note L).

Carcinogenic effect: Meets requirements of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP346 (EC 1272/2008 Annex VI, paragraph 1.1.3.1, Note L).

Mutagenic effect: No data available.

Reproduction effect: No data available.

## 12. ECOLOGICAL INFORMATION

This material is not expected to present any environmental problems other than those associated with oil spills. Not volatile, not soluble in water. Slow biodegradable in aerobic conditions. When the material is used and disposed according to laws in force, there are not known effects on environment.

## 13. DISPOSAL CONSIDERATION

Do not dispose where cumulus is a source of risk. Mechanical recovery can be used. Disposal has to be done in safe conditions.

Applicable law:

Disposal must be done according to EU dispositions and every statal and/or local normatives.

## 14. TRANSPORT INFORMATION

Not classified as hazardous for transport by air, sea or road.

## 15. REGULATORY INFORMATION

Listed in EINECS inventory.

## 16. OTHER INFORMATION

R phrases:	R45 - May cause cancer.
S phrases:	S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53 - Avoid exposure - obtain special instructions before use.
GHS H phrases:	H350 - May cause cancer.
GHS P phrases:	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P308+P313 - IF exposed or concerned: Get medical advice/attention. P405 - Store locked up. P501 - Dispose of contents/container in accordance with local/regional/national/ international regulation.
GHS classification notes:	H - The classification and labelling shown for this substance applies to the hazardous property(ies) indicated by the hazard statement(s) in combination with the hazard class(es) and category(ies) shown. The requirements of Article 4 for manufacturers, importers or downstream users of this substance apply to all other hazard classes and categories. For hazard classes where the route of exposure or the nature of the effects leads to a differentiation of the classification of the hazard class, the manufacturer, importer or downstream user is required to consider the routes of exposure or the nature of the effects not already considered. The final label shall follow the requirements of Article 17 and of section 1.2 of Annex I. L - The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Ensure awareness of risk, flammability, asphyxia, respect of laws in force.  
Keep away unnecessary, not informed of danger, not trained personnel.

Neither the above named supplier, nor any of its subsidiaries, collaborators or agents, assumes any liability whatsoever for the accuracy or completeness of the information contained herein, or any kind of damage due to incorrect applications and/or in conditions different from specified above.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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