# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

**1.1. Product Identifier**

Product name: Gazpromneft Compressor S Synth-100

**Additional identification**

Chemical name: Not applicable.
CAS-No: Not applicable.

**1.2. Recommended use** Compressor oil
**Restriction on use** None identified

**1.3. Details of the supplier of the safety data sheet**

“Gazpromneft – lubricants”, Ltd,
14/3 Krzhizhanovskogo str. 117218, Moscow- Russia.
SDS.Lubricants@gazprom-neft.ru
Tel. +7 495 642-99-69 (between 9 AM and 6 PM Moscow time).
Fax +7 495 921-48-63

**1.4. Emergency telephone number**

Tel. +7 495 642-99-69 (add 56101)
(between 8 AM and 5 PM Moscow time).

## 2. HAZARDS IDENTIFICATION

**2.1. Classification of the substance or mixture**

Classification according to Global Harmonized System (GHS) standards.
The product is not classified as dangerous according to Global Harmonized System (GHS) standards.

**2.2. Label elements**

Not applicable
Safety data sheet available on request.

**Contains:** N-1-Naphthylaniline

**2.3. Other hazards which do not result in GHS classification:**

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.
Other Hazards: No other hazards

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1. Substances**

Not applicable: this product is regulated as a mixture.

**3.2. Mixtures**

**Hazardous components in accordance with GHS**

| Chemical Name | CAS / EC | Percent by Weight | Classification |
|---|---|---|---|
| Base oil-unspecified lubricating oils | CAS:74869-22-0<br>EC:278-012-2 | 30-40 | Not classified (*) |
| Base oil - unspecified - residual oils (petroleum), solvent dewaxed | CAS:64742-62-7<br>EC:265-166-0 | 30-40 | Not classified (*) |
| Distillates (petroleum), hydrotreated heavy paraffinic | CAS: 64742-54-7<br>EC: 265-157-1 | 30-40 | Not classified (*) |
| Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-transbutyl- 4 hydroxyphenyl) propionate | CAS:125643-61-0<br>EC:406-040-9 | 0,1-1 | Aquatic Chronic 4, H413 |

**Note:**

** 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.*

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

**Inhalation** Remove exposed person to fresh air if adverse effects are observed.

**Eye contact** Flush thoroughly with water. If irritation occurs, get medical assistance. Remove contact lenses, if present and easy to do. Continue rinsing.

**Skin contact** Take off contaminated clothing and wash before re-use. Wash with soap and water. If skin irritation or rash occurs, get medical attention. Get medical attention if symptoms occur.

**Ingestion** Do not induce vomiting, get medical attention showing the SDS and label hazardous. Treat symptomatically.

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

No further relevant information available.

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

Seek medical attention if irritation or symptoms persist

## 5. FIRE-FIGHTING MEASURES

**5.1. Extinguishing media** Use extinguishing media appropriate to the surrounding fire conditions (carbon dioxide ($CO_2$); dry chemical; foam; sand; water spray). Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** Burning produces irritating, toxic and obnoxious fumes. Combustion products highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide and unidentified organic compounds will be evolved when this material undergoes combustion.

**5.3. Advice for firefighters** Wear suitable respiratory equipment when necessary. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures** Eliminate all sources of ignition in vicinity of spilled material. Ensure adequate ventilation of the working area. Surfaces contaminated with the product will become slippery. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. See protective measures under point 7 and 8.

**6.2. Environmental precautions** Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so.

**6.3. Methods and material for containment and cleaning up** Use appropriate techniques such as applying noncombustible absorbent materials or pumping. Sweep up. Transfer to suitable, labeled containers for disposal. Residual liquid can be absorbed on inert material.

**6.4. Reference to other sections** See also section 8 and 13

## 7. HANDLING AND STORAGE

**7.1. Precautions for safe handling** Avoid contact with skin and eyes, inhalation of vapors and mists. Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.

**7.2. Conditions for safe storage, including any incompatibilities** Keep in a cool, dry, well-ventilated area. Keep containers tightly closed. Stored in correctly labeled containers.

**7.3. Specific end use(s)** No further relevant information available.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1. Control parameters**

Occupational Exposure Limits

| Chemical name | Type | Exposure Limit Values | Source |
|---|---|---|---|
| Base oil - unspecified - residual oils (petroleum), solvent dewaxed | TWA | 5,4 mg/m$^3$ | US. ACGIH Threshold Limit Values (02 2012) |
| Base oil-unspecified lubricating oils | TWA | 5,4 mg/m$^3$ | US. ACGIH Threshold Limit Values (02 2012) |
| Distillates (petroleum), hydrotreated heavy paraffinic | TWA | 5,4 mg/m$^3$ | US. ACGIH Threshold Limit Values (02 2012) |

**8.2. Exposure controls**

**Appropriate engineering controls:** Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation or adequate ventilation should be used at points where dust, mist, vapors or gases can escape into the room air.

**Individual protection measures:** Wear protective clothing. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

**Eye/face protection:** Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

**Skin protection - Hand protection:** Use nitrile or neoprene gloves. Long sleeve shirt is recommended. Wear a chemically protective when contact with material may occur. Use neoprene or nitrile rubber boots when necessary to avoid contaminating shoes. Launder contaminated clothing before reuse.

**Respiratory protection:** Use in ventilated area. Use respirator with a combination organic vapor and high efficiency filter cartridge just if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

**Hygienic and Technical measures:** 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

| | |
|---|---|
| **Physical State** | Liquid |
| **Color** | Yellow-brown |
| **Odour** | Petroleum odor |
| **pH** | Not applicable |
| **Pour point** | < -25 °C |
| **Initial boiling point and boiling range** | Not determined |
| **Flash point** | ≥ 220 °C (Cleveland Open Cup, ASTMD 92) |
| **Evaporation rate** | Not applicable |
| **Upper/lower flammability** | Not applicable |
| **Vapour density** | Not determined |
| **Vapour pressure** | Not applicable |
| **Density** | 875,0 kg/m$^3$ (ASTM D4052 at 15 °C) |
| **Solubility in water** | Insoluble |
| **Partition coefficient: n-octanol/water** | Not applicable |

| | |
|---|---|
| **Auto-ignition temperature** | ≥ 165 °C |
| **Decomposition temperature** | Not applicable |
| **Viscosity (at 40 °C)** | 90,00-110,00 $mm^2/s$ (ASTM D 445) |
| **Viscosity (at 100 °C)** | >11,00 $mm^2/s$ (ASTM D 445) |
| **Explosive properties** | Not applicable |
| **Oxidizing properties** | Not determined |
| **Volatile Organic compounds - VOCs** | Not applicable |
| **Other information** | |
| **Miscibility** | Not applicable |
| **Conductivity** | Not applicable |

## 10. STABILITY AND REACTIVITY

**10.1. Reactivity** This product has no significant hazards with respect to reactivity. Stable under normal conditions

**10.2. Chemical stability** Stable under normal conditions. Will not decompose if stored and used as recommended.

**10.3. Possibility of hazardous reactions** Will not occur. Stable under normal conditions.

**10.4. Conditions to avoid** Elevated temperatures, sparks and open flames.

**10.5. Incompatible materials** Strong oxidizing agents.

**10.6. Hazardous decomposition products** Burning produces irritating, toxic and obnoxious fumes.

## 11. TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects**

**Toxicological information regarding the mixture:**

Products have not been tested. Evaluation has been made through data of components.

| | |
|---|---|
| **Acute toxicity** | Based on available data, the classification criteria are not met.<br>Not classified |
| **Skin corrosion/irritation** | Based on available data, the classification criteria are not met.<br>Not classified.<br>Avoid direct contact. Repeated or prolonged skin contact may cause irritation. Contact with heated product may cause thermal burns. Based on data from components or similar materials. |
| **Serious eye damage/irritation** | Based on available data, the classification criteria are not met.<br>Not classified.<br>Vapors may cause eye damage/irritation. Evaluation is based on data from components or similar materials. |
| **Respiratory or skin sensitization** | Inhalation: Based on available data, the classification criteria are not met. Not classified<br>If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.<br>Skin: Based on available data, the classification criteria are not met. Not classified. |
| **Carcinogenicity** | Based on available data, the classification criteria are not met.<br>Not classified. PCA content for base oils (IP 346) < 3 % |
| **Germ cell mutagenicity** | Based on available data, the classification criteria are not met.<br>Not classified |
| **Reproductive toxicity** | Based on available data, the classification criteria are not met.<br>Not classified. |

| | |
|---|---|
| **STOT-single exposure** | Based on available data, the classification criteria are not met.<br>Not classified |
| **STOT-repeated exposure** | Based on available data, the classification criteria are not met.<br>Not classified |
| **Aspiration hazard** | Based on available data, the classification criteria are not met.<br>Not classified. |

**Toxicological information on main components of the mixture:**

| | |
|---|---|
| Base oil - unspecified - lubricating oils<br>CAS: 74869-22-0<br>EC: 278-012-2 | Acute oral/rat $LD_{50}$ > 5000 mg/kg<br>Acute dermal/rabbit $LD_{50}$ > 2000 mg/kg<br>Acute inhalation/rat $LC_{50}$ > 5000 mg/m$^3$ |
| Base oil - unspecified - residual oils (petroleum), solvent dewaxed<br>CAS:64742-62-7<br>EC:265-166-0 | Acute oral/rat $LD_{50}$ > 5000 mg/kg<br>Acute dermal/rabbit $LD_{50}$ > 2000 mg/kg<br>Acute inhalation/rat $LC_{50}$ > 5000 mg/m$^3$ |
| Distillates (petroleum), hydrotreated heavy paraffinic<br>CAS: 64742-54-7<br>EC: 265-157-1 | Acute oral/rat $LD_{50}$ > 5000 mg/kg<br>Acute dermal/rabbit $LD_{50}$ > 5000 mg/kg<br>Acute inhalation/rat $LC_{50}$ = 5.53 mg/m$^3$ |

### 11.2. Information on other hazards

11.2.1 Endocrine disrupting properties.
No endocrine disruptor substances present in concentration >= 0.1%

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Dispose in accordance with applicable regulations, avoid release to the environment.
Eco-toxicological information: Not classified for environmental hazards.

**List of components with eco-toxicological properties**

| Quantity | Component | Ecotox Infos |
|---|---|---|
| 30-40% | Base oil - unspecified - lubricating oils<br>CAS: 74869-22-0<br>EC: 278-012-2 | $EL_{50}$ Aquatic acute toxicity Daphnia magna > 10000 mg/L 48h<br>NOEL Aquatic acute toxicity Algae > 100 mg/L 72h<br>$LL_{50}$ Aquatic acute toxicity Fish > 100 mg/L 96h<br>NOELR Aquatic chronic toxicity Daphnia magna = 10mg/L 21 days<br>NOELR Aquatic chronic toxicity Fish = 10 mg/L |
| 30-40% | Base oil - unspecified - residual oils (petroleum), solvent dewaxed<br>CAS:64742-62-7<br>EC:265-166-0 | $EL_{50}$ Aquatic acute toxicity Daphnia magna > 10000 mg/L 48h<br>NOEL Aquatic acute toxicity Algae > 100 mg/L 72h<br>$LL_{50}$ Aquatic acute toxicity Fish > 100 mg/L 96h<br>NOELR Aquatic chronic toxicity Daphnia magna = 10mg/L 21 days<br>NOELR Aquatic chronic toxicity Fish = 10 mg/L |
| 30-40% | Distillates (petroleum), hydrotreated heavy paraffinic<br>CAS: 64742-54-7<br>EC: 265-157-1 | $EL_{50}$ Aquatic acute toxicity Daphnia magna > 10000 mg/L 48h<br>$LL_{50}$ Aquatic acute toxicity Fish Pimephales promelas> 100 mg/L 96h<br>NOEL Aquatic acute toxicity Algae Pseudokirchneriella subcapitata >= 100 mg/L 48h<br>NOELR Aquatic chronic toxicity Daphnia magna = 10mg/L 21 days<br>NOELR Aquatic chronic toxicity Fish Oncorhynchus mykiss = 1000 mg/L 14d |

### 12.2. Persistence and degradability

| Component | Result | Duration | Method | Conclusion |
|---|---|---|---|---|
| Base oil - unspecified - lubricating oils | 31 % | 28d | - | Non-readily biodegradable |
| Base oil - unspecified - residual oils (petroleum), solvent dewaxed | 31 % | 28d | - | Non-readily biodegradable |

| | | | | |
|---|---|---|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | 31 % | 28d | - | Non-readily biodegradable |

*Note: Based on data from similar materials.*

**12.3. Bio accumulative potential** No additional information available

**12.4. Mobility in soil** Product floats on water (insoluble) and can entrape small organisms. The product could easily disperse in soil. Products have not been tested. Evaluation has been made through data of components.

**12.5. Results of PBT and vPvB assessment** No PBT, vPvB substances present in concentration >= 0.1%.

**12.6. Endocrine disrupting properties** No endocrine disruptor substances present in concentration >= 0.1%

**12.7. Other adverse effects** No components with environmental hazard properties.

## 13. DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

**Disposal methods** Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.
Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue, which may exhibit hazards of product.

## 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

| | ADR/RID | IMDG | IATA |
|---|---|---|---|
| **UN number** | Not applicable | Not applicable | Not applicable |
| **UN proper shipping name** | Not applicable | Not applicable | Not applicable |
| **Transport hazard class(es)** | Not applicable | Not applicable | Not applicable |
| **Packing group** | Not applicable | Not applicable | Not applicable |
| **Environmental hazards** | No | No | No |

**Other information:**
**IMDG**: Not applicable.

**Special precautions for user:**
Not applicable.

**Transport in bulk according to Annex II of Marpol and the IBC Code:**
Not applicable.

## 15. REGULATORY INFORMATION

**15.1. Safety, health and environmental regulations/ legislation specific for the substance or mixture**
All components comply with the following chemical inventory requirements:
Canada (DSL). All components of this product are listed on the Domestic Substances List or are exempt.
China (IECSC). All components of this product are listed on the Inventory of Existing Chemical Substances in China.
EU (EINECS). All components of this product are listed on the European Inventory of Existing Commercial Chemical Substances or are exempt.
New Zealand (NZIoC). All components of this product are listed on NZIoC. Do not have an individual approval but may be used under an appropriate group standard or are exempt.
Thailand (TECI). All components of this product are listed on the Thailand Existing Chemicals Inventory or are exempt.
Taiwan (TCSI). All components of this product are listed on the Taiwan Chemical Substance Inventory or are exempt.

**15.2. Chemical safety assessment**
No Chemical Safety Assessment has been carried out for the mixture.

## 16. OTHER INFORMATION

| Hazard class and category | Description |
|---|---|
| - | - |

**Text of Hazard statements in Section 3**

H413 – May cause long lasting harmful effects to aquatic life.

**Legend to abbreviations and acronyms used in the safety data sheet:**

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
BCF: Biological Concentration Factor
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CMR: Carcinogenic, Mutagenic and Reprotoxic
CSA: Chemical Safety Assessment
DMEL: Derived Minimal Effect Level
DMSO: Dimethyl sulfoxide.
DNEL: Derived No Effect Level.
$EC_{50}$: Half Maximal Effective Concentration
EINECS (EC): European Inventory of Existing Commercial Chemical Substances.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IATA: International Air Transport Association.
$IC_{50}$: half maximal inhibitory concentration
IMDG: International Maritime Code for Dangerous Goods.
$LC_{50}$: Lethal concentration, for 50 percent of test population.
$LD_{50}$: Lethal dose, for 50 percent of test population.
N.A.: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PMT: Persistent, Mobile, Toxic)
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STOT: Specific Target Organ Toxicity.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
vPvM: Very Persistent, Very Mobile

**Further information**

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

**Paragraphs modified from the previous revision:**

New version

**Revision**

0