SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006 (REACH)

HIGH TEMP MP

Revision Date: 2018-06-22

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. **Product identifier**

Product name: HIGH TEMP MP
Number: Mixture

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

Identified uses: Lubricating grease.

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

Supplier: NTN-SNR ROULEMENTS
1, rue des Usines - BP 2017
74000 ANNECY France
Tel: +33 (0)4 50 65 30 00
Fax: +33 (0)4 50 65 32 91

For further information, please contact:

Contact Point: Laboratory Service NTN SNR Roulements
E-mail Address: fds@ntn-snr.fr

1.4. **Emergency telephone number**

Emergency Tel. (Office hours) +33 (0)4 50 65 97 55
Emergency Tel. (France) ORFILA (INRS) +33 (0)1 45 42 59 59
Emergency Tel. (EU): 112 (Available 24 hours a day)

Section 2: HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture**
HIGH TEMP MP

Revision Date: 2018-06-22
Version 4.04

REGULATION (EC) No 1272/2008

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

Classification
The product is not classified as dangerous according to Regulation (EC) No. 1272/2008

2.2. Label elements

Labelled according to REGULATION (EC) No 1272/2008

Signal word
None

Hazard Statements
None

Precautionary statements
None

Supplemental Hazard Statements
EUH210 - Safety data sheet available on request

2.3. Other hazards

Physical-Chemical Properties
Contaminated surfaces will be extremely slippery.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

The product is made from synthetic base oils.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC-No</th>
<th>REACH Registration Number</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of:</td>
<td></td>
<td>01-0000015606-69***</td>
<td>^</td>
<td>5&lt;10</td>
<td>Aquatic Chronic 4 (H413)</td>
</tr>
<tr>
<td>triphenylthiophosphate and tertiary butylated phenyl derivatives</td>
<td>421-820-9***</td>
<td>no data available</td>
<td>192268-65-8</td>
<td>1&lt;2.5</td>
<td>Repr. 2 (H361d) Aquatic Chronic 4 (H413)</td>
</tr>
</tbody>
</table>
Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice
IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.***

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.***

Skin contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.***

Inhalation
Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.***

Ingestion
Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.***

Protection of first-aiders
First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.***

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

Eye contact
Not classified based on available data.***

Skin contact
Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.***

Inhalation
Not classified based on available data.***

Ingestion
Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.***

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

Notes to physician
Treat symptomatically.***

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media
Section 6: ACCIDENTAL RELEASE MEASURES

5.2. Special hazards arising from the substance or mixture

Special hazard
Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Phosphorous oxides, Nitrogen oxides (NOx), Mercaptans.***

5.3. Precautions for fire-fighters

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective suit.***

Other information
Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 7: HANDLING AND STORAGE

6.1. Personal precautions, protective equipment and emergency procedures

General Information
Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.***

6.2. Environmental precautions

General Information
Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained.***

6.3. Methods and material for containment and cleaning up

Methods for containment
If necessary dike the product with dry earth, sand or similar non-combustible materials.***

Methods for cleaning up
Dispose of contents/container in accordance with local regulation. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.***

6.4. Reference to other sections

Personal protective equipment
See Section 8 for more detail.

Waste treatment
See section 13.
**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

### 7.1. Precautions for safe handling

**Advice on safe handling**
For personal protection see section 8. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing.***

**Prevention of fire and explosion**
Take precautionary measures against static discharges.***

**Hygiene measures**
Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Provide regular cleaning of equipment, work area and clothing. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.***

### 7.2. Conditions for safe storage, including any incompatibilities

**Technical measures/Storage conditions**
Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Store at room temperature. Protect from moisture.***

**Materials to avoid**
Strong oxidising agents.***

### 7.3. Specific use(s)

**Specific use(s)**
Please refer to Technical Data Sheet for further information.***

---

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

### 8.1. Control parameters

**Exposure limits**
Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

**Legend**
See section 16

**Derived No Effect Level (DNEL)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Short term, systemic effects</th>
<th>Long term, systemic effects</th>
<th>Long term, local effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives *** 192268-65-8</td>
<td></td>
<td>0.590 mg/m³ (inhalation) 0.170 mg/kg bw/day (dermal)</td>
<td></td>
</tr>
</tbody>
</table>

**DNEL Consumer***

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Short term, systemic</th>
<th>Short term, local effects</th>
<th>Long term, systemic</th>
<th>Long term, local effects</th>
</tr>
</thead>
</table>
HIGH TEMP MP

Revision Date: 2018-06-22  Version 4.04

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Water</th>
<th>Sediment</th>
<th>Soil</th>
<th>Air</th>
<th>STP</th>
<th>Oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>triphenylthiophosphate and tertiary butylated phenyl derivatives *** 192268-65-8</td>
<td>0.001 mg/l (fw)</td>
<td>2.8 mg/kg sediment dw (fw)</td>
<td>0.560 mg/kg soil dw ***</td>
<td>1 mg/l ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0001 mg/l (fw)</td>
<td>0.280 mg/kg sediment dw (mw)***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.010 mg/l (ir)***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A mixture of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>triphenylthiophosphate and tertiary butylated phenyl derivatives *** 192268-65-8</td>
<td>0.000440 mg/l (fw)</td>
<td>8.99 - 2 250 mg/kg sediment dw (fw)</td>
<td>1.79 mg/kg soil dw</td>
<td>32 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.000044 mg/l (mw)</td>
<td>0.899 - 225 mg/kg sediment dw (mw)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Occupational Exposure Controls

Engineering measures

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.***

Personal protective equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered. The personal protective equipment (PPE) recommendations apply to the product AS DELIVERED. In case of mixtures or formulations, it is suggested that you contact the relevant PPE suppliers.***

Respiratory protection

None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). Type A/P1. Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.***

Eye protection

If splashes are likely to occur, wear:. Safety glasses with side-shields. EN 166.***

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing. Type 4/6.***
Hand protection: Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0.38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.***

Environmental exposure controls

General Information: The product should not be allowed to enter drains, water courses or the soil.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>light yellow***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical state @20°C</td>
<td>solid***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No information available***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Not applicable***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available***</td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>No information available***</td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>Lower</td>
<td>No information available***</td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No information available***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour density</td>
<td>No information available***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>0.900***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>900*** kg/m³***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>logPow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not applicable***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>None under normal processing***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HIGH TEMP MP

Revision Date: 2018-06-22

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

General Information
None under normal processing.***

10.2. Chemical stability

Stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions
No dangerous reaction known under conditions of normal use.***

10.4. Conditions to avoid

Conditions to avoid
Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sparks.***

10.5. Incompatible materials

Materials to avoid
Strong oxidising agents.***

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products
Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Phosphorous oxides, Nitrogen oxides (NOx), Mercaptans. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S.***

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Local effects
Product Information

Skin contact
Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.***

Eye contact
Not classified based on available data.***

Inhalation
Not classified based on available data.***
Ingestion. Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.***

ATEmix (inhalation-dust/mist) 49.70*** mg/l***
ATEmix (inhalation-vapour) 243.00*** mg/l***

Acute toxicity - Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives ***</td>
<td>LD50 &gt;2000 mg/kg bw (rat)</td>
<td>LD50 &gt;2000 mg/kg bw (rat)</td>
<td></td>
</tr>
</tbody>
</table>

Sensitisation

Sensitisation Not classified based on available data.***

Specific effects

Carcinogenicity Not classified based on available data.***
Mutagenicity

Germ cell mutagenicity Not classified based on available data.***

Reproductive toxicity Not classified based on available data. Contains toxic substance(s) listed as toxic to reproduction.***

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>European Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives ***</td>
<td>Repr. 2 (H361d)</td>
</tr>
</tbody>
</table>

Repeated dose toxicity

Target Organ Effects (STOT)

Specific target organ systemic toxicity (single exposure) Not classified based on available data.***
Specific target organ toxicity - repeated exposure Not classified based on available data.***
Aspiration toxicity Not classified based on available data.***

Other information

Other adverse effects Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposures (contact with contaminated clothing).***

12.1. Toxicity

Not classified based on available data.***

Acute aquatic toxicity - Product Information***
Acute aquatic toxicity - Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-[4-[(4-[4-(4-[3-octadecylureido)benzyl]phenyl]urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea</td>
<td>EC50(72h) &gt;100 mg/l</td>
<td>EC50(48h) &gt;100 mg/l</td>
<td>LC50(96h) &gt;100 mg/l</td>
<td>EC20(3h) 403 mg/l</td>
</tr>
<tr>
<td>A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>192268-65-8</td>
<td>EC50(21d) &gt;= 5.5 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chronic aquatic toxicity - Product Information
No information available.***

Chronic aquatic toxicity - Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>192268-65-8</td>
<td>NOEC(21d) &gt;= 5.5 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effects on terrestrial organisms
No information available.***

12.2. Persistence and Degradability

General Information
No information available.

12.3. Bioaccumulative potential

Product Information
No information available.***

logPow
No information available***

Component Information
## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

- **Waste from residues / unused products:** Should not be released into the environment. Do not empty into drains. Dispose of in accordance with the European Directives on waste and hazardous waste.***

- **Contaminated packaging:** Empty containers should be taken to an approved waste handling site for recycling or disposal.***

- **EWC Waste Disposal No:** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions: 12 01 12.***

- **Other information:** Refer to section 8 for safety and protective measures for disposal personnel.***

## Section 14: TRANSPORT INFORMATION

- **ADR/RID:** not regulated
- **IMDG/IMO:** not regulated
- **ICAO/IATA:** not regulated
- **ADN:** not regulated
Section 15: REGULATORY INFORMATION

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

European Union

Further information

No information available***

15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available***

15.3. National regulatory information

The United Kingdom

• Avoid exceeding occupational exposure limits (see section 8).

Ireland

• Avoid exceeding occupational exposure limits (see section 8).

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H361d - Suspected of damaging the unborn child
H413 - May cause long lasting harmful effects to aquatic life***

Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
High Temp MP

Revision Date: 2018-06-22

UVCC = Substance of unknown or Variable composition, Complex reaction products or Biological material
DNEL = Derived No Effect Level
PNEC = Predicted No Effect Concentration
dw = dry weight
fw = fresh water
mw = marine water
or = occasional release

Legend Section 8

TWA: Time Weight Average
STEL: Short Time Exposure Limit

+ Sensitiser
** Hazard Designation
M: Mutagen

* Skin designation
C: Carcinogen
R: Toxic to reproduction

Revision Date: 2018-06-22
Revision Note *** Indicates updated section.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive. It is the user’s responsibility to ensure that he is subject to no other obligations than those mentioned.

End of Safety Data Sheet