SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Ready Booster / Ready Booster 60

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

1.2.1 Relevant uses

Lubrication system

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Supplier

Company: NTN-SNR ROULEMENTS

Adress: 1, rue des Usines

BP 2017

74000 ANNECY

FR

Division

Telephone

Tel.: +33 (0)4 50 65 30 00

Fax: +33 (0)4 50 65 32 91

e-mail

fds@ntn-snr.fr

Contact person

Service Laboratoire NTN-SNR Roulements

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Ox. Liq. 2: H272 May intensify fire; oxidiser.

Acute Tox. 3: H301 Toxic if swallowed.

Skin Irrit. 2: H315 Causes skin irritation.

Eye Irrit. 2: H319 Causes serious eye irritation.

STOT SE 3: H335 May cause respiratory irritation.

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.

Carc. 1A: H350i May cause cancer by inhalation.

Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

Repr. 1B: H360FD May damage fertility. May damage the unborn child.

2.2 Label elements

This product is an article and therefore it does not require labelling according to EC directives [REACH/CLP].

2.3 Other hazards

Physico-chemical hazards

The structural design of the cells prevents release of the hazardous media contained therein when the unit is used for its intended purpose.

The device contains an inaccessible stock of hazardous substances in a closed cartridge in order to produce the gases needed for operation (nitrogen/hydrogen). Do not therefore open the device or cartridge by force. Do not touch any substances that escape in the event of damage to the cartridge, and place the damaged cartridge in a closed container. While doing so, wear protective gloves and avoid contact with skin. Contact the manufacturer immediately. Further information is available on request.

Human health dangers

The contained dangerous materials are not freely available with foreseeable use.

Environmental hazards

The contained dangerous materials are not freely available with foreseeable use.

Other hazards

No particular hazards known.
SECTION 3: Composition / Information on ingredients

Product-type:
The product is an article.

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - &lt;15</td>
<td>Sodium azide&lt;br&gt;CAS: 26628-22-8, EINECS/ELINCS: 247-852-1, EU-INDEX: 011-004-00-7&lt;br&gt;GHS/CLP: Acute Tox. 2: H300 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410</td>
</tr>
<tr>
<td>&lt; 6</td>
<td>1,2-Dimethoxyethane&lt;br&gt;CAS: 110-71-4, EINECS/ELINCS: 203-794-9, EU-INDEX: 603-301-00-3&lt;br&gt;GHS/CLP: Flam. Liq. 2: H225 - Acute Tox. 4: H332 - Repr. 1B: H360FD</td>
</tr>
</tbody>
</table>

Comment on component parts
The concentrations of the ingredients are valid for batteries. They are not for the complete system.
The structural design of the cells prevents release of the hazardous media contained therein when the unit is used for its intended purpose.
SVHC (Candidate List of Substances of Very High Concern for authorisation) ≥ 0.1%
CAS 110-71-4 - 1,2-Dimethoxyethane
The concentrations of the ingredients are valid for gas generation cell. They are not for the complete system.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Measures are only valid for damaged lubrication systems.
Adhere to personal protective measures when giving first aid.

Inhalation
Consult a doctor immediately.
Remove the victim into fresh air and keep him calm.

Skin contact
In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact
In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion
Consult a doctor immediately.
Induce the patient to vomit of his own accord only if fully conscious.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed
No information available.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.
Forward this sheet to the doctor.
SECTION 5: Fire-fighting measures

5.1 Extinguishing media
   Suitable extinguishing media
   - Carbon dioxide.
   - Water spray jet.
   - Dry powder.
   - Foam.

   Extinguishing media that must not be used
   - none

5.2 Special hazards arising from the substance or mixture
   - Risk of formation of toxic pyrolysis products.
   - Nitrogen oxides (NOx).
   - Hydrogen chloride (HCl).

5.3 Advice for firefighters
   - Use self-contained breathing apparatus.
   - Wear full protective suit.
   - Cool containers at risk with water spray jet.
   - Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   - Keep people away and stay on the upwind side.
   - Use personal protective equipment.
   - Use breathing apparatus if exposed to vapours/dust/aerosol.
   - Lock off contaminated area.

6.2 Environmental precautions
   - Do not discharge leakages into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up
   - Take up mechanically.
   - Dispose of absorbed material in accordance with the regulations.
   - Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).

6.4 Reference to other sections
   - See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   - No special measures necessary if used correctly.
   - Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities
   - No special measures necessary.
   - Do not store with combustible materials.
   - Protect from heat/overheating.
   - Keep container tightly closed.

7.3 Specific end use(s)
   - See product use, SECTION 1.2
SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS:</th>
<th>EINECS/ELINCS:</th>
<th>EU-INDEX:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>247-852-1</td>
<td>011-004-00-7</td>
</tr>
<tr>
<td>Long-term exposure: 0,1 mg/m³, Sk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term exposure (15-minute): 0,3 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel sulphate</td>
<td>7786-81-4</td>
<td>232-104-9</td>
<td>028-009-00-5, Reg-No.: 01-2119439361-44-XXXX</td>
</tr>
<tr>
<td>Long-term exposure: 0,1 mg/m³, as Ni, Sk, Sen</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ingredients with occupational exposure limits to be monitored (EU)

<table>
<thead>
<tr>
<th>Substance / EC LIMIT VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
</tr>
<tr>
<td>CAS: 26628-22-8, EINECS/ELINCS: 247-852-1, EU-INDEX: 011-004-00-7</td>
</tr>
<tr>
<td>Eight hours: 0,1 mg/m³, H</td>
</tr>
<tr>
<td>Short-term (15-minute): 0,3 mg/m³</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Measures are only valid for damaged lubrication systems.
If there is a risk of splashing:
Safety glasses. (EN 166:2001)

Hand protection
Not required under normal conditions.
Measures are only valid for damaged lubrication systems.
The details concerned are recommendations. Please contact the glove supplier for further information.
> 0,4 mm: Butyl rubber, >480 min (EN 374-1/-2/-3).

Skin protection
Measures are only valid for damaged lubrication systems.
Protective clothing.

Other
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Avoid contact with eyes.
The contained dangerous materials are not freely available with foreseeable use.

Respiratory protection
If ventilation is insufficient, wear respiratory protection.

Thermal hazards
No information available.

Delimitation and monitoring of the environmental exposition
Comply with applicable environmental regulations limiting discharge to air, water and soil.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>capsule</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not applicable</td>
</tr>
<tr>
<td>pH-value</td>
<td>8.3 - 8.8</td>
</tr>
<tr>
<td>pH-value [%]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling point [°C]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flash point [°C]</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas) [°C]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>no</td>
</tr>
<tr>
<td>Vapour pressure/gas pressure [kPa]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Bulk density [kg/m³]</td>
<td>not applicable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>miscible</td>
</tr>
<tr>
<td>(Liquid)</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient [n-octanol/water]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not applicable</td>
</tr>
<tr>
<td>Relative vapour density determined in air</td>
<td>No information available.</td>
</tr>
<tr>
<td>Evaporation speed</td>
<td>No information available.</td>
</tr>
<tr>
<td>Melting point [°C]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Autoignition temperature [°C]</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition temperature [°C]</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with acids and strong oxidizing agents.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No hazardous decomposition products known.
### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product</th>
<th>Toxicological data of complete product are not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE-mix, oral, ~ 210 mg/kg bw.</td>
<td><strong>Irritant</strong> Calculation method</td>
</tr>
</tbody>
</table>
SECTION 12: Ecological information

12.1 Toxicity

| Substance                     | LC50, (96h), Lepomis macrochirus: 0.7 mg/l (ECOTOX). | EC50, (48h), Daphnia pulex: 4.2 mg/l (ECOTOX). | Propylene carbonate, CAS: 108-32-7 | LC50, (96h), Leuciscus idus: ~ 5300 mg/l. | EC50, (48h), Daphnia magna: 500 mg/l. | LC0, (96h), Cyprinus carpio: 1000 mg/l. | NOEC, (72h), Desmodesmus subspicatus: 900 mg/l. | EC10, Pseudomonas putida: > 10000 mg/l (17 h). | nickel sulphate hexahydrate, CAS: 10101-97-0 | LC50, (96h), Oncorhynchus mykiss: 1.28 mg/l (ECOTOX Database). | EC50, (48h), Daphnia magna: 1 mg/l (OECD 202). | IC50, (72h), Pseudokirchneriella subcapitata: 0.75 mg/l (OECD 201). |

12.2 Persistence and degradability

- Behaviour in environment compartments: not determined
- Behaviour in sewage plant: not applicable
- Biological degradability: not applicable

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Ecological data of complete product are not available.

The contained ingredients can be harmful for the environment, but they are hermetically enclosed in article and cannot be released.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
For recycling, consult manufacturer.

Waste no. (recommended) 150110*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID

Inland navigation (ADN) 3091

Transport by land according to ADR/RID

Marine transport in accordance with IMDG 3091

Air transport in accordance with IATA 3091

14.2 UN proper shipping name

Transport by land according to ADR/RID

Lithium Metall Batteries contained in equipment (Not subject of ADR in accordance to special provisions 188)

Inland navigation (ADN) Lithium Metall Batteries contained in equipment (Not subject of ADR in accordance to special provisions 188)

Marine transport in accordance with IMDG Lithium Metall Batteries contained in equipment (Not subject of IMDG in accordance to special provisions 188)

Air transport in accordance with IATA Lithium Metall Batteries contained in equipment (PI 970 Part II)

14.3 Transport hazard class(es)

Transport by land according to ADR/RID 9

Inland navigation (ADN) 9

Marine transport in accordance with IMDG 9

Air transport in accordance with IATA 9
14.4 Packing group
Transport by land according to ADR/RID

Inland navigation (ADN)

Marine transport in accordance with IMDG

Air transport in accordance with IATA

14.5 Environmental hazards
Transport by land according to ADR/RID

Inland navigation (ADN)

Marine transport in accordance with IMDG

Air transport in accordance with IATA

14.6 Special precautions for user
Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
No information available.

SECTION 15: Regulatory information

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

EEC-REGULATIONS

TRANSPORT-REGULATIONS

NATIONAL REGULATIONS (GB):

- Observe employment restrictions for people
  Observe employment restrictions for young people.
  Observe employment restrictions for women of child-bearing age, for mothers-to-be and nursing mothers and for young people.

- VOC (2010/75/CE)
  not applicable

15.2 Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.
Section 16: Other Information

16.1 Hazard statements (SECTION 03)

- H372 Causes damage to organs through prolonged or repeated exposure.
- H360D May damage the unborn child.
- H350i May cause cancer by inhalation.
- H341 Suspended of causing genetic defects.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H260 In contact with water releases flammable gases which may ignite spontaneously.
- H314 Causes severe skin burns and eye damage.
- H360FD May damage fertility. May damage the unborn child.
- H332 Harmful if inhaled.
- H225 Highly flammable liquid and vapour.
- H302+H332 Harmful if swallowed or if inhaled.
- H335 May cause respiratory irritation.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H272 May intensify fire; oxidiser.
- H410 Very toxic to aquatic life with long lasting effects.
- H400 Very toxic to aquatic life.
- H300 Fatal if swallowed.

16.2 Abbreviations and acronyms:

- ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
- RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
- ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
- ATE = acute toxicity estimate
- CAS = Chemical Abstracts Service
- CLP = Classification, Labelling and Packaging
- DMEL = Derived Minimum Effect Level
- DNEL = Derived No Effect Level
- EC50 = Median effective concentration
- ECB = European Chemicals Bureau
- EEC = European Economic Community
- EINECS = European Inventory of Existing Commercial Chemical Substances
- ELINCS = European List of Notified Chemical Substances
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IC50 = Inhibition concentration, 50%
- IMDG = International Maritime Code for Dangerous Goods
- IUCLID = International Uniform Chemical Information Database
- LC50 = Lethal concentration, 50%
- LD50 = Median lethal dose
- LC0 = lethal concentration, 0%
- LOAEL = lowest-observed-adverse-effect level
- MARPOL = International Convention for the Prevention of Marine Pollution from Ships
- NOAEL = No Observed Adverse Effect Level
- NOEC = No Observed Effect Concentration
- PBT = Persistent, Bioaccumulative and Toxic substance
- PNEC = Predicted No-Effect Concentration
- REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
- STP = Sewage Treatment Plant
- TLV®/TWA = Threshold limit value – time-weighted average
- TLV®STEL = Threshold limit value – short-time exposure limit
- VOC = Volatile Organic Compounds
- vPvB = very Persistent and very Bioaccumulative
16.3 Other information

**Customs Tariff**

- not determined

**Classification procedure**

- Ox. Liq. 2: H272 May intensify fire; oxidiser. (Calculation method)
- Acute Tox. 3: H301 Toxic if swallowed. (Calculation method)
- Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
- Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
- STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
- STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)
- Carc. 1A: H350i May cause cancer by inhalation. (Calculation method)
- Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)
- Repr. 1B: H360FD May damage fertility. May damage the unborn child. (Calculation method)

**Modified position**

- none