1. IDENTIFICATION

Product identifier

Product name: SHELL GADUS S3 V220 C2
Cat. No. 16080821, 16080801, 16080821, 16080831, 16080840, 16080847

Recommended use and restrictions on use

Application: Lubricating grease.
Uses advised against: No specific uses advised against are identified. (*)

Details of the supplier of the safety data sheet

Supplier: Struers Ltd
7275 West Credit Avenue
Ontario L5N 5M9 Mississauga
Canada
Tel: +1 (905) 8148855

Responsible for safety data sheet authoring: Responsible for safety data sheet authoring: DHI
Any questions to the contents of this safety data sheet should be sent to: struers@struers.dk

Emergency telephone number

Infotrac: 1-800-535-5053
Struers CAN: +1 (905) 8148855
(Only during office hours)

2. HAZARDS IDENTIFICATION

Classification of the hazardous product

WHMIS 2015: Aquatic Chronic Toxicity — Category 3

Label elements

H412 Harmful to aquatic life with long lasting effects.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local regulations.

Other hazards

PBT/vPvB: No information available.
Other: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. The harmful effects may increase in used grease. Prolonged or repeated contact with used grease may cause serious skin diseases, such as dermatitis. Greases are generally hazardous to the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: Highly refined mineral oil and additives. DMSO < 3% (IP 346)
4. FIRST-AID MEASURES

**Description of first-aid measures**

**Inhalation:** Move into fresh air and keep at rest. In case of persistent throat irritation or coughing: Seek medical attention and take along these instructions.

**Skin contact:** Remove contaminated clothing immediately and wash skin with soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

**Ingestion:** Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. Do not induce vomiting.

**Most important symptoms and effects, both acute and delayed**

**Symptoms/effects:** See section 11 for more detailed information on health effects and symptoms.

**Indication of any immediate medical attention and special treatment needed**

**Medical attention/treatments:** Treat symptomatically.

### WHMIS 2015:

<table>
<thead>
<tr>
<th>%</th>
<th>CAS-No.:</th>
<th>EC No.:</th>
<th>REACH Reg. No.:</th>
<th>Chemical name:</th>
<th>Hazard classification:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3</td>
<td>91648-65-6</td>
<td>293-927-7</td>
<td>01-2119976351-35-xxxx</td>
<td>Alkyl thiadiazole</td>
<td>Aquatic Chronic Toxicity Category 3</td>
<td></td>
</tr>
<tr>
<td>&lt;3</td>
<td>26780-96-1</td>
<td>-</td>
<td>-</td>
<td>Trimethyldihydroquinoline, homopolymer</td>
<td>Aquatic Chronic Toxicity Category 3</td>
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</tr>
<tr>
<td>&lt;2.4</td>
<td>68457-79-4</td>
<td>270-608-0</td>
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<td>Zinc dialkyldithiophosphate</td>
<td>Skin Irritation Category 2</td>
<td>SCL</td>
</tr>
<tr>
<td>&lt;2.4</td>
<td>84418-50-8</td>
<td>282-762-6</td>
<td>-</td>
<td>Zinc naphthenate</td>
<td>Aquatic Chronic Toxicity Category 3</td>
<td></td>
</tr>
</tbody>
</table>

Notes: SCL: Specific Concentration Limit
5. FIRE-FIGHTING MEASURES

**Extinguishing media**

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the hazardous product**

Specific hazards: During fire, health hazardous gases may be formed.

**Advice for fire-fighters**

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel: Avoid inhalation of oil mist and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces. For personal protection, see section 8.

For emergency responders: No specific recommendations. For personal protection, see section 8.

**Environmental precautions**

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

**Methods and material for containment and cleaning up**

Spill Cleanup Methods: Absorb spillage with oil-absorbing material. Clean contaminated area with oil-removing material.

**Reference to other items**

References: For personal protection, see section 8. For waste disposal, see section 13.

7. HANDLING AND STORAGE

**Precautions for safe handling**

Safe handling advice: Avoid inhalation of oil mist and contact with skin and eyes. Always remove grease with soap and water or skin cleaning agent, never use organic solvents. Observe good chemical hygiene practices.

Technical measures: Work practice should minimize contact.

Technical precautions: When working with heated grease, mechanical ventilation may be required.

**Conditions for safe storage, including any incompatibilities**

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container in a dry, cool and well-ventilated place.

**Specific end-use(s)**

Specific use(s): No information available.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Other provincial OEL's may apply.

Occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>As:</th>
<th>Exposure limits</th>
<th>Type:</th>
<th>Notes:</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Mineral oil (mist)</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>Quebec</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10 mg/m³</td>
<td>STEL</td>
<td>15min</td>
<td>BC</td>
</tr>
<tr>
<td>-</td>
<td>Oil mist, mineral, severely refined</td>
<td>-</td>
<td>1 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>Alberta</td>
</tr>
<tr>
<td>-</td>
<td>Oil mist, mineral</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>Alberta</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10 mg/m³</td>
<td>STEL</td>
<td>15min</td>
<td>Alberta</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapours and oil mist. Provide access to washing facilities incl. soap, skin cleanser and fatty cream.

Personal protection: Personal protection equipment should be chosen according to relevant standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P3) can be used.

Hand protection: Risk of contact: Wear protective gloves. Nitrile gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Breakthrough time: >480 min Thickness: >0,35 mm (*)

Eye protection: Risk of contact: Wear goggles/face shield.

Skin protection: No special precautions.

Environmental Exposure Controls: Not available.
## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Grease</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Red</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Hydrocarbon</td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td>1 - 10% (V)</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>&lt;0.5 Pa (68°F)</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>insoluble in water</td>
</tr>
<tr>
<td><strong>Partition coefficient (n- octanol/water)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature (°C)</strong></td>
<td>&gt;608°F</td>
</tr>
<tr>
<td><strong>Decomposition temperature (°C)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Oxidising properties</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Other information**

| Other data                       | Volatile Organic Compound (VOC): 0 g/l     |
10. STABILITY AND REACTIVITY

Reactivity
Reactivity: None known.

Chemical stability
Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions
Hazardous Reactions: None known.

Conditions to avoid
Conditions/materials to avoid: Extremes of temperatures. Direct sunlight.

Incompatible materials
Incompatible materials: Strong oxidizing substances.

Hazardous decomposition products
Hazardous decomposition products: None known.
11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

The harmful effects may increase in used grease.

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.
Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.
Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive Toxicity: Based on available data, the classification criteria are not met.
STOT - Single exposure: Based on available data, the classification criteria are not met.
STOT - Repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Inhalation of oil mist or vapors formed during heating of the product will irritate the respiratory system and provoke coughing.

Skin contact: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Prolonged or repeated contact with used grease may cause serious skin diseases, such as dermatitis.

Eye contact: Direct contact may irritate.

Ingestion: May irritate and cause malaise.

Specific effects: Carcinogenicity:
IARC Cancer Review: Group 3 for Highly-refined oils.
NTP Not Listed.

Additional information: Handling of used oils:
Protect health - avoid prolonged and repeated skin contact. Wash with soap and water. Protect the environment - do not pollute drains, water courses or the soil. Contact your local authority for any used oil disposal instructions.
12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity: Harmful to aquatic life with long lasting effects.

Persistence and degradability
Degradability: This product is expected to be heavily biodegradable.

Bioaccumulative potential
Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil
Mobility: No data available.

Results of PBT and vPvB assessment
PBT/vPvB: No information available.

Other adverse effects
Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste from residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Contaminated packaging: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

14. TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, TDG).

UN number
UN-No: -

UN proper shipping name
Proper Shipping Name: -

Transport hazard class(es)
Class: -

Packing group
PG: -

Environmental hazards
Marine pollutant: -
Environmentally Hazardous substance: -

Special precautions for user
Special precautions: None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Transport in bulk: Not known.
15. REGULATORY INFORMATION

Safety, health and environmental regulations specific to the product

Special provisions: DSL: Not all components listed.

National regulation: Hazardous Products Regulations, with amendments.
Canadian Environmental Protection Act, Reporting for the Domestic Substances List (DSL), with amendments.
Ontario: Control of Exposure to Biological or Chemical Agents R.R.O. 1990, Reg. 833, with amendments (2016).
Quebec: Regulation respecting the quality of the work environment, with amendments (2013-12-13).

Abbreviations and acronyms used in the safety data sheet:
PBT = Persistent, Bioaccumulative and Toxic.
vPvB = very Persistent and very Bioaccumulative.

Additional information: Classification according to WHMIS 2015:
On basis of test data.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.