

JOHN ASTLEY & SONS LTD

MATERIAL SAFETY DATA SHEET

53538

06/05/12

SHELL GADUS S2 V220 2

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: Shell Gadus S2 V220 2

Intended Use: Automotive and industrial grease.

Product Code: 001D8451

Stock Code: 53538

Manufacturer: Shell UK Oil Products Limited
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Ellesmere Port
CH65 4HB
United Kingdom
Telephone 0151-350-4000
Fax 0151-350-4000
Emergency Telephone Number 0151-350-4595

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2. HAZARDS IDENTIFICATION

EC Classification: Not classified as dangerous under EC criteria.

Health Hazards: Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. High-pressure injection under the skin may cause serious damage including local necrosis. Used grease may contain harmful impurities.

Signs/Symptoms: Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.

Safety Hazards: Not classified as flammable but will burn.

Environmental Hazards: Not classified as dangerous for the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description: lubricating grease containing highly refined mineral oils and additives.

Hazardous Components:	Name	CAS	EINECS	Content	Classification*
	Zinc alkyl dithiophosphate	68649-42-3	272-028-3	< 2.40 %	Xi, N R38; R41; R51/53

Additional Information: he highly refined mineral oil contains <3% (w/w) DMSO- extract, according to IP346.

* **Classification:** The full text of the Risk phrases in this section, are listed in section 16 and apply only to individual constituents and not the finished product.

SHELL GADUS S2 V220 2**4. FIRST AID MEASURES**

- General Information:** Not expected to be a health hazard when used under normal conditions.
- Inhalation:** No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
- Skin Contact:** Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention. When using high-pressure equipment, injection of product under the skin can occur. If high-pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.
- Eye Contact:** Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
- Ingestion:** In general, no treatment is necessary unless large quantities are swallowed, however, get medical advice.
- Advice to Physician:** Treat symptomatically. High-pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

5. FIRE FIGHTING MEASURES

- General:** Clear fire area of all non-emergency personnel.
- Specific Hazards:** Hazardous combustion products may include a complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
- Suitable Extinguishing Media:** Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
- Unsuitable Extinguishing Media:** Do not use water in a jet.
- Protective Equipment for Firefighters:** Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

- Personal protection:** Avoid contact with spilled or released material. For guidance on selection of personal protective equipment, see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.
- Protective measures:** Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
- Clean Up Methods:** Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

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7. HANDLING & STORAGE

- General Precautions** Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.
- Handling:** Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
- Storage:** Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Storage Temperature: 0 - 50°C / 32 - 122°F
The storage of this product may be subject to the Control of Pollution (Oil Storage) (England) Regulations. Further guidance maybe obtained from the local environmental agency office.
- Recommended Materials:** For containers or container linings, use mild steel or high-density polyethylene.
- Unsuitable Materials:** PVC.
- Additional Information:** Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication "COSHH Essentials".

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Material	Source	Type	ppm mg/m ³
Oil mist, mineral	ACGIH	TWA [Inhalable fraction]	5 mg/m ³

- Additional Information:** Due to the product's semi-solid consistency, generation of mists and dusts is unlikely to occur.
- Exposure Controls:** The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
- Personal Protective Equipment:** Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
- Respiratory Protection:** No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level, which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65 °C (149 °F)] meeting EN14387.
- Hand Protection:** Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

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Eye Protection:	Wear safety glasses or full-face shield if splashes are likely to occur. Approved to (EL) Standard EN166.
Protective Clothing:	Skin protection not ordinarily required beyond standard issue work clothes.
Monitoring Methods:	Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances, biological monitoring may also be appropriate.
Environmental Exposure Controls:	Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown. Semi-solid at ambient temperature.
Odour:	Slight hydrocarbon.
pH:	Not applicable.
Initial Boiling Point:	Data not available
Dropping point:	> 180°C/356°F
Flash point:	>180°C/356°F (COC)
Explosion limits:	Typical 1-10 % (V) (Based on mineral oil)
Auto-ignition:	>320°C/608°F
Vapour pressure:	< 0.5 Pa at 20 °C / 68 °F (estimated value(s))
Density:	Typical 900 kg/m ³ at 15 °C / 59 °F
Water solubility:	Negligible.
n-octanol/water partition:	> 6 (based on information on similar products)
Coefficient (log Pow)	
Kinematic viscosity:	Not applicable.
Vapour density (air=1):	> 1 (estimated value(s))
Evaporation rate:	Data not available

10. STABILITY AND CHEMICAL PROPERTIES

Stability:	Stable under the recommended storage and handling conditions (see section 7.).
Conditions to Avoid:	Extremes of temperature and direct sunlight.
Materials to Avoid:	Strong oxidising agents.
Hazardous Decomposition Products:	Hazardous decomposition products are not expected to form during normal storage.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment:	Information given is based on data on the components and the toxicology of similar products.
Acute Oral Toxicity:	Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat
Acute Dermal Toxicity:	Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit
Acute Inhalation Toxicity:	Not considered an inhalation hazard under normal conditions of use.
Skin Irritation:	Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Eye Irritation:	Expected to be slightly irritating.

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Respiratory Irritation:	Inhalation of vapours or mists may cause irritation.
Sensitisation:	Not expected to be a skin sensitiser.
Repeated Dose Toxicity:	Not expected to be a hazard.
Mutagenicity:	Not considered a mutagenic hazard.
Carcinogenicity:	Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
Reproductive and Developmental toxicity:	Not expected to be a hazard.
Additional Information:	Used grease may contain harmful impurities that have accumulated during use. The concentration of such harmful impurities will depend on use and they may present risks to health and the environment on disposal. ALL used grease should be handled with caution and skin contact avoided as far as possible. High-pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

12. ECOLOGICAL INFORMATION

Acute Toxicity:	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non-toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.
Mobility:	Semi-solid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence/degradability:	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
Bioaccumulation:	Contains components with the potential to bioaccumulate.
Other Adverse Effects:	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Product:	Do not allow large quantities to enter the drains or water courses or dispose of where ground or surface water may be affected.
Containers:	Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with the regulations made under the Control of Pollution and Environmental Protection Acts.

14. TRANSPORT INFORMATION

Classification:	Not classified dangerous for transport.
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15. REGULATORY INFORMATION

Classification:	Not classified as dangerous under EC criteria. No Hazard Symbol required
	The information contained in this Health and Data Sheet does not constitute the user's own assessment of the workplace risk as required by other Health and Safety Legislation.
	The Provision of the Health and Safety at Work Act and Control of Substances Hazardous to Health Regulations apply to the use of this product at work

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16. OTHER INFORMATION

The full text of Risk phrases listed in section 3.

R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For details of the substances presenting a health hazard within the meaning of the Chemicals (Hazard Information & Packaging) regulations 1993 see under Section 3 of the Safety Data Sheet.

The information contained in this Health and Safety sheet is provided in accordance with the requirements of the Chemical (Hazard Information & Packaging) Regulations.

The product should not be used for purposes other than shown in section 1, without first referring to the supplier and obtaining written instructions.

As the specific conditions of the use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of the relevant legislation are complied with.

Further information and the relevant advice can be found in:

Environmental Protection Act 1990 (as amended). Health and Safety at Work Act 1974.
Consumers Protection Act 1987. Control of Pollution Act 1974. Environmental Act 1995. Factories Act 1961.
Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations.
Chemicals (Hazard Information and Packaging for Supply) Regulations 2002.
Control of Substances Hazardous to Health Regulations 1994 (as amended).
Road Traffic (Carriage of Dangerous Substances in Packages) Regulations.
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations.
Road Traffic (Carriage of Dangerous Substances in Road Tankers in Tank Containers) Regulations.
Road Traffic (Training of Drivers of Vehicles Carrying Dangerous Goods) Regulations.
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations.
Health and Safety (First Aid) Regulations 1981.
Personal Protective Equipment (EC Directive) Regulations 1992.
Personal Protective Equipment at Work Regulations 1992.

The information contained in this Safety Data Sheet is based on the present state of knowledge and the current legislation it provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or the suitability for particular applications.

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