

Chemical Name: Aeroshell Grease 7

Manufacturer: Shell

Container size: 14.1 oz

Location: VLA

Disposal: Place empty container in trash.

Material Safety Data Sheet

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name : AEROSHELL Grease 7

Uses : Synthetic grease for aircraft. For further details consult the

AeroShell Book on www.shell.com/aviation.

Manufacturer/Supplier : SOPUS Products

PO BOX 4427

Houston, TX 77210-4427

USA

MSDS Request : 877-276-7285

Emergency Telephone Number

Spill Information : 877-242-7400 **Health Information** : 877-504-9351

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synthetic oil grease thickened with clay, containing additives.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odour : Yellow brown. Semi-solid at ambient temperature. Slight

hydrocarbon.

Health Hazards : May cause sensitisation by skin contact. High-pressure

injection under the skin may cause serious damage including

local necrosis.

Safety Hazards : Not classified as flammable but will burn.

Environmental Hazards : Harmful to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

Health Hazards

Inhalation : Under normal conditions of use, this is not expected to be a

primary route of exposure.

Skin Contact: May cause sensitisation by skin contact. Prolonged or repeated

skin contact without proper cleaning can clog the pores of the

skin resulting in disorders such as oil acne/folliculitis.

Eye Contact : May cause slight irritation to eyes.

Ingestion : Low toxicity if swallowed.

Other Information : High-pressure injection under the skin may cause serious

damage including local necrosis. Used grease may contain

harmful impurities.

Signs and Symptoms : Skin sensitisation (allergic skin reaction) signs and symptoms

may include itching and/or a rash. Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection. Oil acne/folliculitis signs and symptoms may

Material Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or

Aggravated Medical Condition

: Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this

material: Skin.

Environmental Hazards : Harmful to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

Additional Information Under normal conditions of use or in a foreseeable emergency,

this product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication

Standard, 29 CFR 1910,1200.

4. FIRST AID MEASURES

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.

Eve Contact Flush eye with copious quantities of water. If persistent

irritation occurs, obtain medical attention.

: In general no treatment is necessary unless large quantities Ingestion

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 ischaemia. Prompt surgical decompression, debridement and evacuation of foreign

material should be performed under general anaesthetics, and

wide exploration is essential.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Flash point > 215 °C / 419 °F (COC) Upper / lower Typical 1 - 10 %(V)

Flammability or **Explosion limits**

Auto ignition temperature > 320 °C / 608 °F

Specific Hazards Hazardous combustion products may include: A complex

mixture of airborne solid and liquid particulates and gases

Material Safety Data Sheet

(smoke). Carbon monoxide. Unidentified organic and inorganic

compounds.

Suitable Extinguishing

Media

Unsuitable Extinguishing

Media

Protective Equipment for

Firefighters

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Do not use water in a jet.

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

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 all 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.

7. HANDLING AND 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. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine

assessment of local circumstances to help determine

appropriate controls for safe handling, storage and disposal of

this material.

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: -50 - 50 °C / -58 - 122 °F

Recommended Materials : For containers or container linings, use mild steel or high

density polyethylene.

Unsuitable Materials : PVC.

Additional Information : Polyethylene containers should not be exposed to high

temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Contains no components with occupational exposure limit values

Material Safety Data Sheet

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

Respiratory Protection

Personal protective equipment (PPE) should meet **Equipment** recommended national standards. Check with PPE suppliers.

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)].

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, 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.

: Wear safety glasses or full face shield if splashes are likely to **Eye Protection**

occur.

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

Material Safety Data Sheet

: Yellow brown. Semi-solid at ambient temperature. Appearance

Odour Slight hydrocarbon. Not applicable. Ha : Data not available

Initial Boiling Point and

Boiling Range

 $: > 260 \, ^{\circ}\text{C} / 500 \, ^{\circ}\text{F}$

Dropping point Flash point : > 215 °C / 419 °F (COC)Upper / lower Flammability : Typical 1 - 10 %(V)

or Explosion limits

 $: > 320 \, ^{\circ}\text{C} / 608 \, ^{\circ}\text{F}$ Auto-ignition temperature

: < 0.5 Pa at 20 °C / 68 °F (estimated value(s)) Vapour pressure

Density Typical 966 kg/m3 at 15 °C / 59 °F

Water solubility : Nealiaible.

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 (nBuAc=1) : Data not available

10. STABILITY AND REACTIVITY

Stability Stable.

Conditions to Avoid Extremes of temperature and direct sunlight.

Materials to Avoid Strong oxidising agents.

Hazardous Decomposition : Hazardous decomposition products are not expected to form

Products

during normal storage.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment Information given is based on data on the components and the

toxicology of similar products.

Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat **Acute Oral Toxicity** Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit **Acute Dermal Toxicity Acute Inhalation Toxicity**

Not considered to be an inhalation hazard under normal

conditions of use.

Expected to be slightly irritating. Prolonged or repeated skin Skin Irritation

contact without proper cleaning can clog the pores of the skin

resulting in disorders such as oil acne/folliculitis.

: Expected to be slightly irritating. **Eye Irritation**

Respiratory Irritation Inhalation of vapours or mists may cause irritation.

Sensitisation Expected to be a skin sensitizer. May cause an allergic skin

reaction in sensitive individuals. Reports of photosensitization

by phenothiazine are inconclusive.

Repeated Dose Toxicity

Mutagenicity Carcinogenicity : Not expected to be a hazard. Not considered a mutagenic hazard.

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

AEROSHELL Grease 7

MSDS# 56170E

Version 12.0

Effective Date 07/03/2008
According to OSHA Hazard Communication Standard, 29 CFR

1910.1200

Material Safety Data Sheet

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

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity : Poorly soluble mixture. May cause physical fouling of aquatic

organisms. Expected to be harmful: LL/EL/IL50 10-100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).

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

Material Disposal : Recover or recycle if possible. It is the responsibility of the

waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in

drains or in water courses.

Container Disposal : Dispose in accordance with prevailing regulations, preferably

to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Local Legislation : Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation Classification (49CFR)

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

IMDG

Material Safety Data Sheet

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations.

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status

EINECS All components listed or

polymer exempt.

TSCA All components listed.
DSL All components listed.

SARA Hazard Categories (311/312)

Immediate (Acute) Health Hazard.

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. OTHER INFORMATION

NFPA Rating (Health,

Fire, Reactivity)

: 0, 1, 0

MSDS Version Number : 12.0

MSDS Effective Date : 07/03/2008

MSDS Revisions : A vertical bar (|) in the left margin indicates an amendment

from the previous version.

MSDS Regulation : The content and format of this MSDS is in accordance with the

OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Uses and Restrictions : This product should not be used with certain types of rubber

without first determining the compatibility between the rubber

and the grease.

Contains a synthetic oil and should not be used in contact with

AEROSHELL Grease 7 MSDS# 56170E Version 12.0 Effective Date 07/03/2008

Material Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

incompatible seal materials.

This product must be used, handled and applied in accordance with the requirements of the equipment manufacturer's

manuals, bulletins and other documentation.

MSDS Distribution : The information in this document should be made available to

all who may handle the product.

Disclaimer : The information contained herein is based on our current

knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to

be obtained from the use of the product.