



SHIELD
LUBRICANTS

SAFETY DATA SHEET

Revision: 2 Jan 2019

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: SHIELD LUBRICANTS ISO 46
- Product Part Number: SCISO46

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

- Use of the substance/mixture: Hydraulic Fluid
- Use advised against: For specific application information consult Technical Data Sheet

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Shield Chemicals Ltd
- Address of Supplier: Moat Farm
Moat Street
Gestingthorpe
Halstead
Essex
CO9 3AT
- Telephone: +44 (0)1787460558 Office hours only.
- Email: sales@shieldchemicals.co.uk

1.4 Emergency telephone number

- Emergency Telephone: +44 (0)1787460558
Mon-Thurs 08:00 - 17:00
Fri 08:00 - 16:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Not classified

2.2 Label elements

- Signal Word: Not classified
- Hazard statements
Not classified.
- Precautionary statements
Not classified.

2.3 Other hazards

SECTION 3: Composition/information on ingredients



3.2 Mixtures

Datasheet Number SCISO46- v3.0.0

Prometheus version 1.4.6.2

Hydraulic 46

Revision: 2 Jan 2019

1

SECTION 3: Composition/information on ingredients (....)

- Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts
CAS Number: 85940-28-9
EC Number: 288-917-4
REACH Registration Number: 01-2119521201-61-xxxx
Concentration: <1.0%
H Statements: H315, H318, H411
Symbols:
Categories: Skin Irrit. 2, Eye Dam. 1
- Highly refined mineral oil mix
CAS Number: Various see Section 16
EC Number: Not available.
REACH Registration Number: Not available
Concentration: <100%
H Statements: Not classified.
Symbols:
Categories:

SECTION 4: First aid measures

4.1 Description of first aid measures

- Inhalation
If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
- Contact with eyes
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses (if easy to do so). Get medical attention.
- Contact with skin
Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
- Ingestion
Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

- See Section 11 for more detailed information on health effects and symptoms.



- 4.3 Indication of any immediate medical attention and special treatment needed
- Treatment should be symptomatic and directed to relieving any effects.

Datasheet Number SCISO46- v3.0.0

Prometheus version 1.4.6.2
Hydraulic 46

Revision: 2 Jan 2019

2

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.
- Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the

5.2 Special hazards arising from the substance or mixture

- If heated or in cases of fire, pressure in a vessel will increase and container may burst. - Combustion products may include: carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide), metal oxide/ oxides, phosphorous oxides and sulphur oxides (SO, SO₂, etc..)

5.3 Advice for firefighters

- Promptly isolate and secure the scene, remove all unnecessary and untrained persons from the vicinity if there is a fire.
- Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European Standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

Spillage causes slippery surface

6.1 Personal precautions, protective equipment and emergency procedures

- Stop any leak if it is safe to do so.
- Absorb with sand or other inert absorbent. Collect in containers and seal securely.
- Adopt best manual handling considerations when handling, carrying and dispensing.
- Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

6.2 Environmental precautions

- Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

6.3 Methods and material for containment and cleaning up

- Stop any leak if it is safe to do so.
- Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.
- Dispose of in compliance with all local and national regulations.



6.4 Reference to other sections

- See Section 1 for emergency contact information.
- See Section 5 for firefighting measures.
- See Section 8 for information on appropriate personal protective equipment.
- See Section 12 for environmental precautions.
- See Section 13 for additional waste treatment information.

Datasheet Number SCISO46- v3.0.0

Prometheus version 1.4.6.2

Hydraulic 46

Revision: 2 Jan 2019

3

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Use appropriate personal protective equipment.
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

- Store in accordance with local regulations.
- Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.

7.3 Specific end use(s)

- The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substances

Chemical Name WEL (short term) WEL (long term)

Highly refined mineral oil mix - 5mg/m³

- If this product contains ingredients with exposure limits, personal and/or workplace atmosphere monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8.2 Exposure controls

Control:

- Engineering Controls
- Appropriate Engineering



All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled.

Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

No special requirements under ordinary conditions of use and with adequate ventilation. - Eye Protection:

If contact is likely, safety glasses are recommended.

- Hand Protection

- As specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled and the conditions of work and use. Recommended: Nitrile or other suitable glove. Breakthrough time represents how long a glove can be expected to provide effective permeation resistance. Always consult with your glove supplier for up-to-date technical information on breakthrough.

Datasheet Number SCISO46- v3.0.0

Prometheus version 1.4.6.2

Hydraulic 46

Revision: 2 Jan 2019

4

SECTION 8: Exposure controls/personal protection (....)

- Skin and Body Protection

Wear appropriate clothing as protection against splashing.

In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact. - Hygiene Measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking.

Routinely wash work clothing and protective equipment to remove contaminants.

- Respiratory Protection

No Special requirements under ordinary conditions of use and with adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Amber Liquid

- Odour: Characteristic.

- Density: 0.856 at 15°C

- Viscosity (kinematic): 46cSt at 40°C

- Viscosity (kinematic): 7cSt at 100°C

- Freezing point/Range: No data available.

- Boiling Point/Range: No data available

- Flashpoint: >200°C

- Oxidising Properties: No information available

- Autoignition Temperature: No information available

9.2 Other information

- The figures in this section are for guidance only please always use them in conjunction with the technical data sheet.



SECTION 10: Stability and reactivity

10.1 Reactivity

- No specific test data available for this product. Refer to, conditions to avoid and incompatible material sections for additional information.

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- None under normal processing.
- Hazardous polymerisation does not occur.

10.4 Conditions to avoid

- Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

- Reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous decomposition products

Datasheet Number SCISO46- v3.0.0

5

Prometheus version 1.4.6.2
Hydraulic 46

Revision: 2 Jan 2019

SECTION 10: Stability and reactivity (....)

- Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Potential acute health effects.
Inhalation may cause irritation to the respiratory tract.
Ingestion: May cause nausea and diarrhoea.
Skin contact: Defatting to the skin. May cause skin dryness and irritation.
Eye contact: No known significant effects or critical hazards.
No other specific data and information available.
- Potential chronic health effects
No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

- Not classified as dangerous

12.2 Persistence and degradability

- Not readily biodegradable.

12.3 Bioaccumulative potential



- No data available.

12.4 Mobility in soil

- Immiscible with water.

12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects

- Spillages may form an oil layer on water surfaces causing physical damage to organisms. Oxygen transfer may also be impaired.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Dispose of in compliance with all local and national regulations.

13.2 Classification

- This material and its containers must be disposed of as controlled waste. Dispose of waste via a licensed waste disposal contractor.

Datasheet Number SCISO46- v3.0.0

Prometheus version 1.4.6.2
Hydraulic 46

Revision: 2 Jan 2019

6

SECTION 14: Transport information

14.1 UN number

- UN No.: Not regulated.

14.2 UN proper shipping name

- Proper Shipping Name: Not applicable.

14.3 Transport hazard class(es)

- Hazard Class: Not applicable.

14.4 Packing group

- Packing Group: Not applicable.

14.5 Environmental hazards

- Not classified.

14.6 Special precautions for user

- Not available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not available.



SECTION 15: Regulatory information

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

- Regulation (EC) No 1907/2006 of the European Parliament and the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
- Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2 Chemical safety assessment

- A chemical safety assessment (CSA) for this product has not yet been completed

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H315: Causes skin irritation. H318: Causes serious eye damage. H411: Toxic to aquatic life with long lasting effects.

May contain one or more of the following: 101316-69-2 / RRN 01-2119486948-13, 101316-70-5, 101316-71-6, 101316-72-7 / RRN 01-2119489969-06, 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4 / RRN 01-2119483621-38, 64741-97-5 / RRN 01-2119480374 -36, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN 01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN 01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-64-9, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN 01-2119474889-13, 74869-22-0 / RRN 01-2119495601-36, 90669-74-2 / RRN 01-2119970171-43

Datasheet Number SCISO46- v3.0.0

7

Prometheus version 1.4.6.2
Hydraulic 46

Revision: 2 Jan 2019

SECTION 16: Other information (...)

Disclaimer

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in

combination with any other materials or in any other process

--- end of safety datasheet ---



SHIELD[™]
LUBRICANTS

SAFETY DATA SHEET

Datasheet Number SCISO46- v3.0.0

Prometheus version 1.4.6.2

8