



# SAFETY INFORMATION SHEET

## SANDVIK ROCK DRILL PERFORMANCE FLUIDS

### HEAVY-DUTY SHANK LUBRICATION OIL

### SANDVIK OS46

ACCORDING TO REGULATION (EC) NO 1272/2008 WE ARE NOT OBLIGED TO SUPPLY A SAFETY DATA SHEET OR MATERIAL SAFETY DATA SHEET WITH THIS PRODUCT. HOWEVER AS YOUR SAFETY IS OUR FIRST PRIORITY AT SANDVIK WE MADE AVAILABLE A SAFETY INFORMATION SHEET TO ACCOMPANY THE PRODUCT

INTERNAL NO: SIS-SANDVIK OS46/ENG/METRIC

ISSUED: 7 FEBRUARY 2017

#### 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

##### 1.1: Product identifier

Product name	Sandvik Heavy-duty Shank lubrication Oil
Product code	Sandvik OS46

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

Identified uses	Hydraulic oil.
Uses advised against	This product must not be used in applications other than those listed in chapter 1 without first seeking the advice of the supplier.

##### 1.3: Details of the supplier of the safety information sheet

Name	Sandvik Mining and Construction Logistics Ltd.
Address	Harcourt Road, Dublin, Ireland
Email	For ALL content or SDS related inquiries contact us <a href="mailto:sds.smrt@sandvik.com">sds.smrt@sandvik.com</a>

##### 1.4: Emergency telephone number

Emergency telephone numbers	In case of chemical emergency (spill, leak, fire, exposure or accident) call our service provider UK National Chemical Emergency Centre (NCEC):  For Europe and if no country-specific number listed: +44 1865 407 333 For Brazil: +55 11 3197 5891 For US: +1 202 464 2554 For Mexico: +52 55 5004 8763 For Africa: +27 21 300 2732 For Australia: +61 2 8014 4558 For NZ: +64 9 929 1483 For China (mainland): + 86 532 8388 9090 For China (outside): +86 512 8090 3042
Hours of operation	24 hours per day / 7 days per week.



## 2: HAZARDS IDENTIFICATION

### 2.1: Classification of the substance or mixture

The product has not been classified as hazardous and does not need to be labelled according to regulation (EU) no 1272/2008 (CLP).

Hazard summary	Physical hazards: no data available.
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### 2.2: Label elements

Not applicable.

### 2.3: Other hazards

	By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (chapter 7) and personal protective equipment (chapter 8) are kept. The product may not be released into the environment without control.
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## 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1: Mixtures

General information	Mixture containing severely refined base oils and additives. The components are not hazardous or are below required disclosure limits.
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## 4: FIRST AID MEASURES

General advice	Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into clothing pockets.
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### 4.1: Description of first aid measures

Protection of first-aiders	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
If inhaled	Supply fresh air. If symptoms persist, obtain medical advice.
In case of skin contact	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.  The product is not skin irritating.  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.
In case of eye contact	Flush eye with copious quantities of water while lifting the eye lids. If persistent irritation occurs, obtain medical attention.
In case of ingestion	Rinse mouth thoroughly.
If swallowed	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

#### 4.2: Most important symptoms and effects, both acute and delayed

Symptoms	May cause skin and eye irritation.
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#### 4.3: Indication of any immediate medical attention and special treatment needed

Hazards	No data available.
Treatment	Get medical attention if symptoms occur.  Notes to doctor / physician: Treat symptomatically. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function.

### 5: FIRE-FIGHTING MEASURES

#### 5.1: Extinguishing media

Suitable extinguishing media	CO <sub>2</sub> , fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added.
Unsuitable extinguishing media	Do not use water in a jet.

#### 5.2: Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.
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#### 5.3: Advice for fire-fighters

Special protective equipment for fire-fighters	Proper protective equipment is to be worn. Self-contained breathing apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant standards (e.g. Europe EN469).
Special fire-fighting procedures	No data available.

### 6: ACCIDENTAL RELEASE MEASURES

#### 6.1: Personal precautions, protective equipment and emergency procedures

Personal precautions	In case of spills, beware of slippery floors and surfaces. Avoid contact with skin and eyes.
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#### 6.2: Environmental precautions

Environmental precautions	Prevent from spreading (e.g. by binding or oil barriers).
	Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water.

#### 6.3: Methods and materials for containment and cleaning up

Methods for cleaning up	Slippery when spilt. Avoid accidents, clean up immediately. Stop the flow of material, if this is without risk. Absorb with liquid-binding material (sand, diatomite, acid-binders, universal binders, sawdust). Dispose of the material collected according to regulations.
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#### 6.4: Reference to other sections

For guidance on selection of personal protective equipment see chapter 8 of this Safety Information sheet. See chapter 7 for information on safe handling. For guidance on disposal of spilled material see chapter 13 of this Safety Information sheet.

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### 7: HANDLING AND STORAGE

General precautions	Use the information in this information sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
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#### 7.1: Precautions for safe handling

Provide adequate ventilation. Observe good industrial hygiene practices. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products.

Avoid prolonged or repeated contact with skin.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

#### 7.2: Conditions for safe storage, including any incompatibilities

Local regulations concerning handling and storage of water-polluting products have to be followed. Prevent formation of aerosols. Do not heat up to temperatures close to the flash point.

Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closable containers.

Store at ambient temperature. Refer to chapter 15 for any additional specific legislation covering the packaging and storage of this product.

#### 7.3: Specific end use(s)

Specific use(s)	Not applicable.
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### 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1: Control parameters

Occupational exposure limits:

None of the components have assigned exposure limits.

#### 8.2: Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment:**

<b>General</b>	Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in-handling the chemicals or the mineral oil products.
<b>Eye / face protection</b>	Safety glasses (EN 166) recommended during refilling.
<b>Skin / hand protection</b>	Nitrile butyl rubber (NBR). Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
<b>Other</b>	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.
<b>Respiratory protection</b>	Seek advice from local supervisor. Ensure good ventilation/ exhaust at the workplace. Avoid breathing vapour/ aerosol.
<b>Thermal hazards</b>	No data available.
<b>Hygiene measures</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

**Environmental exposure controls:**

<b>General advice</b>	<p>Take appropriate measures to fulfil the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.</p> <p>Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.</p>
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## 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1: Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow.
Odour	Characteristic.
Odour threshold	Not applicable.
pH	Not applicable.
Freezing point	No data available.
Boiling point	Not applicable.
Flash point	208 °C.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Flammability limit - upper (%)	No data available.
Flammability limit - lower (%)	No data available.
Vapour pressure	< 0.01
Vapour density (air=1)	No data available.
Density	0.88 g/ml (15.0 °C).
Solubility in water	Insoluble in water.
Solubility in other solvents	Soluble in solvent.
Partition coefficient (n-octanol/water)	> 3
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Kinematic viscosity	46 mm <sup>2</sup> /s (40.0 °C).
Explosive properties	No data available.
Oxidizing properties	No data available.

### 9.2: Other information

No data available.

## 10: STABILITY AND REACTIVITY

### 10.1: Reactivity

Not reactive.

### 10.2: Chemical stability

Stable under normal conditions.

### 10.3: Possibility of hazardous reactions

None under normal conditions.

### 10.4: Conditions to avoid

Heat, flames and sparks.

### 10.5: Incompatible materials

Strong oxidizing substances. Strong acids. Strong bases.

### 10.6: Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## 11: TOXICOLOGICAL INFORMATION

### 11.1: Information on toxicological effects

<b>Acute toxicity:</b>	
Oral product	Not classified for acute toxicity based on available data.
Dermal product	Not classified for acute toxicity based on available data.
Inhalation product	Inhalation of vapours in high concentration may cause irritation of respiratory system.
Repeated dose toxicity product	No data available.
Skin corrosion / irritation product	Prolonged contact may cause redness and irritation. May cause skin irritation and/or dermatitis. Product that under high pressure has been forced under the skin, may cause serious cell damage / death under the skin.
Serious eye damage / eye irritation product	Contact with eyes may cause irritation.
Respiratory or skin sensitization product	No data available.
<b>Germ cell mutagenicity:</b>	
In vitro product	No data available.
In vivo product	No data available.
Carcinogenicity product	No data available.
Reproductive toxicity product	No data available.
Specific target organ toxicity - single exposure product	No data available.
Specific target organ toxicity - repeated exposure product	No data available.
Aspiration hazard product	Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.
Other adverse effects	No data available.

## 12: ECOLOGICAL INFORMATION

### 12.1: Toxicity

<b>Acute toxicity:</b>	
Fish product	Not harmful to aquatic organisms. Expected LC/EC 50 value >100 mg/l.
Aquatic invertebrates product	No data available.
<b>Chronic toxicity:</b>	
Fish product	No data available.
Aquatic invertebrates product	No data available.
Toxicity to aquatic plants product	No data available.

### 12.2: Persistence and degradability

Biodegradation product	Potentially degradable, but will persist in the environment for long periods.
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### 12.3: Bio-accumulative potential

Bio-accumulative potential product	Contain components with potential to bio-accumulate (logPow >3).
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### 12.4: Mobility in soil

Mobility	After release, adsorbs onto soil.
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### 12.5: Results of PBT and vPvB assessment

Assessment	This product is not, or does not contain, a substance that is a PBT or a vBvP.
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## 12.6: Other adverse effects

An oil-film may cause physical damage to organisms and disturb the transportation of oxygen in the intermediate zone between air / water or air / soil.

## 13: DISPOSAL CONSIDERATIONS

### 13.1: Waste treatment methods

General information	Dispose in accordance with all applicable regulations.
Disposal methods	Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.
European waste codes	13 02 05*: mineral based non-chlorinated engine, gear and lubricating oils.

## 14: TRANSPORT INFORMATION

### 14.1: UN number

ADR	-
RID	-
IMDG	-
IATA	-

### 14.2: UN proper shipping name

ADR	-
RID	-
IMDG	-
IATA	-

### 14.3: Transport hazard class(es)

ADR	Non-dangerous goods.
RID	Non-dangerous goods.
IMDG	Non-dangerous goods.
IATA	Non-dangerous goods.

### 14.4: Packing group

ADR	-
RID	-
IMDG	-
IATA	-

### 14.5: Environmental hazard(s)

ADR	-
RID	-
IMDG	-
IATA	-

### 14.6: Special precaution(s) for user

ADR	-
RID	-
IMDG	-
IATA	-



**14.7: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code**

Not applicable.
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**15: REGULATORY INFORMATION**
**15.1: Safety, health and environmental regulations / legislation specific for the substance or mixture**

<b>EU regulations</b>	<p>Regulation (EC) No. 2037/2000 substances that deplete the ozone layer: none.</p> <p>Regulation (EC) No. 850/2004 on persistent organic pollutants: none.</p>
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**15.2: Chemical safety assessment**

No chemical safety assessment has been carried out for this substance / mixture.
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**16: OTHER INFORMATION**

<b>Revision Information</b>	Vertical lines in the margin indicate an amendment.
<b>Wording of the H-statements in section 2 and 3</b>	None.

<b>Other information</b>	<p>The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).</p>
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<b>Revision Date</b>	
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The data contained in this safety information sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety information sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety information sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us via [sds.smrt@sandvik.com](mailto:sds.smrt@sandvik.com) to obtain up-to-date safety information sheets. This document was issued electronically and has no signature.

End of Safety Information sheet