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

1.1. Product identifier

Jokisch Monos Neri D46

Further trade names

Old product name: Jokisch Hydrauliköl HLP D 46

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

Use of the substance/mixture

Hydraulic oil

Uses advised against

This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

1.3. Details of the supplier of the safety data sheet

Company name:	Jokisch GmbH	
Street:	Industriestraße 5	
Place:	DE-33813 Oerlinghausen	
Telephone:	+49(0)5202/9734-0	Telefax: +49(0)5202/9734-49
e-mail:	info@jokisch-fluids.de	
e-mail (Contact person):	MSDS@jokisch-fluids.de	
Internet:	www.jokisch-fluids.de	

1.4. Emergency telephone number:

Giftnotruf Berlin: +49 (0) 30 / 30686 790

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

2.2. Label elements

Regulation (EC) No. 1272/2008

Special labelling of certain mixtures

EUH208	Contains Amine phosphate. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. Other 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. Not classified as flammable but will burn.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Highly refined mineral oils and additives

The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
91745-46-9	Amine phosphate			0.1 - < 1 %
	294-716-2			
	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 2; H302 H318 H317 H411			

Full text of H and EUH statements: see section 16.

Further Information

REACH No. : 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-65-0 (01-2119471299-27), 68037-01-4 (01-2119486452-34), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13), 8042-47-5 (01-2119487078-27), 848301-69-9 (01-0000020163-82).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Not expected to be a health hazard when used under normal conditions.

After inhalation

No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

After contact with skin

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.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

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

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.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam. Atomized water. Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

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.

5.3. Advice for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. 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).

Additional information

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

6.2. Environmental precautions

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.

6.3. Methods and material for containment and cleaning up

High slip hazard because of leaking or spilled product. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.4. Reference to other sections

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid prolonged or repeated contact with skin. Avoid breathing dust/fume/gas/mist/vapours/spray.

Advice on protection against fire and explosion

B: Burning liquid or melting substances.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Suitable material: For containers or container linings, use mild steel or high density polyethylene.
Unsuitable material: PVC (Polyvinyl chloride).

Further information on storage conditions

Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
91745-46-9	Amine phosphate			
,				

Additional advice on limit values

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.

8.2. Exposure controls




Appropriate engineering 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.

Protective and hygiene measures

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
When using do not eat, drink or smoke.

Eye/face protection

Wear safety glasses or full face shield if splashes are likely to occur. Approved to EU Standard EN166.

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.
The required protective gloves have to be specified by the glove material and the penetration time of the glove material depending on strength and duration of dermal exposition.

Skin protection

Skin protection not ordinarily required beyond standard issue work clothes.

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.

Environmental exposure controls

Dispose of waste according to applicable legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	amber coloured
Odour:	characteristic
Odour threshold:	No data available

Test method

Changes in the physical state

Initial boiling point and boiling range:	<280 °C	estimated
Pour point:	-24 °C	ISO 3016
Flash point:	223 °C	DIN ISO 2592
Lower explosion limits:	1 vol. %	
Upper explosion limits:	10 vol. %	
Decomposition temperature:	No data available	
Vapour pressure: (at 20 °C)	0,005 hPa	estimated
Density (at 15 °C):	0,88 g/cm³	ISO 12185

Solubility in other solvents

No data available

Partition coefficient:	>6	
Viscosity / kinematic: (at 40 °C)	46 mm²/s	ASTM D 445

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reacts with : Oxidizing agents, strong.

10.4. Conditions to avoid

Protect from sunlight.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be generated.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

The statement is derived from the properties of the single components.

ATEmix tested

	Dose	Species	Source
LD50, oral	>5000 mg/kg	Rat	
LD50, dermal	>5000 mg/kg	Rabbit	

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
91745-46-9	Amine phosphate				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

slightly irritant but not relevant for classification.

Sensitising effects

none Sensitizer

Carcinogenic/mutagenic/toxic effects for reproduction

No experimental indications of mutagenicity in-vivo exist.

STOT-single exposure

No risks worthy of mention.

STOT-repeated exposure

No risks worthy of mention.

Aspiration hazard

No risks worthy of mention.

Specific effects in experiment on an animal

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.

SECTION 12: Ecological information

12.2. Persistence and 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.

12.3. Bioaccumulative potential

Contains components with the potential to bioaccumulate.

12.4. Mobility in soil

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

12.6. 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment

List of Wastes Code - residues/unused products

130110 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils; hazardous waste

List of Wastes Code - used product

130110 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils; hazardous waste

Contaminated packaging

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
Danger releasing substance:	No dangerous good in sense of these transport regulations.

14.6. Special precautions for user

Personal protection equipment: see section 8

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

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	0,0
2004/42/EC (VOC):	0,0
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
Amine phosphate

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,4,9,15,16.
AICS (Australien), DSL (Kanada), IECSC (China), REACH (Europäische Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (Neuseeland), PICCS (Philippinen), TSCA (USA)

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
Repr. - Reproduktionstoxizität
Asp. Tox. - Aspirationstoxizität
Acute Tox. - Akute Toxizität
Aquatic Acute - Akute aquatische Toxizität
Aquatic Chronic - Chronische aquatische Toxizität
Eye Dam. - Augenschaden/-reizung
Eye Irrit. - Augenreizung
Skin Corr. - Ätzwirkung auf die Haut
Skin Irrit. - Hautreizung
Skin Sens. - Hautallergen
Resp. Sens. - Inhalationsallergen
STOT SE - Spezifische Zielorgan-Toxizität - einmalige Exposition
STOT RE - Spezifische Zielorgan-Toxizität - wiederholte Exposition

VOC - Flüchtige organische Verbindungen

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Amine phosphate. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)