

# MATERIAL SAFETY DATA SHEET



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

Commercial Name: BioSafe HO 46 XE  
Manufacturer name: Binol BioSafe OY  
address: PL 101 FIN-21201 RAISIO, FINLAND  
phone: +358 2 443 2111

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Composition: Composition (preparation) based on vegetable oil-based esters  
Hazardous components: None

## 3. HAZARDS IDENTIFICATION

The product is considered not hazardous according to the EU Dangerous Substances/Preparations Directives classification scheme (67/548/EEG, last amended 1999/45/EG).

## 4. FIRST AID MEASURES

Inhalation: Not concerned.  
Skin contact: Wash with detergent and water.  
Eye splashes: Flush with generous amounts of temperate water for a minimum of 10 minutes. Seek medical help if the problems remain.  
Ingestion: Drink water or milk. Do not induce vomiting.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media recommended: CO<sub>2</sub>, dry powder, foam.  
not recommended: Water in a jet.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: None necessary.  
Environment protection: Avoid pollution of sewers and water.  
Cleaning means: Removal with inert absorbent or sand.

## 7. HANDLING AND STORAGE

Handling  
Personal protection: Avoid prolonged and repeated contact with skin. Remove soaked clothes.  
Storage  
Recommended conditions: Storage temperature +10 to +30°C.  
Store in closed container, preferably as delivered.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures: None necessary.  
Personal protective equipment  
Respiratory protection: Not necessary in normal use.  
Hand protection: Impermeable gloves recommended (nitrile rubber).  
Eye protection: Safety goggles recommended.  
Others: Not necessary.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Oil
Viscosity (40°C):	46 mm <sup>2</sup> /s (cSt)
Colour:	Yellow
Odour:	Faint
Flash point (ASTM D 92):	>250°C
Pour point:	-50°C
Vapour pressure:	Negligible under normal conditions
Density (20°C):	968 kg/m <sup>3</sup>
Solubility in water:	Insoluble

## 10. STABILITY AND REACTIVITY

Stability:	Stable product under normal conditions.
Hazardous reactions:	None known.
Conditions to be avoided:	Elevated temperatures (>>100°C).
Hazardous decomposition products:	In case of thermal degradation hazardous gases may be formed (for example CO, CO <sub>2</sub> ).

## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:	LD50 > 2000 mg/kg (OECD 420)
Mutagenicity (OECD 471, Ames test):	Not mutagenic
The values are based on results for the main ingredients.	

## 12. ECOLOGICAL INFORMATION

Acute fish toxicity (ISO 7346/2):	LC <sub>50</sub> >100 mg/l
Acute bacterial toxicity (OECD 209):	EC <sub>0</sub> >100 mg/l

The product is readily biodegradable according to OECD 301.  
The values are based on results for the main ingredients.

## 13. DISPOSAL CONSIDERATIONS

Used product:	As per existing regulations.
Used packaging:	As per existing regulations.

## 14. TRANSPORT INFORMATION

The product is not classified as dangerous goods.

## 15. REGULATORY INFORMATION

Symbols:	None
Risk phrases:	None
Safety phrases:	None
No labelling required according to EU Regulations.	

## 16. OTHER INFORMATION

The product is used as a pressure and hydraulic medium.  
Contact: Karl-Erik Lindén  
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