

MATERIAL SAFETY DATA SHEET



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

Commercial Name: BioSafe BONT
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 based on vegetable oil derivatives
Hazardous components: None
Hazardous impurities: Not concerned

3. HAZARDS IDENTIFICATION

Health: Under ordinary typical use, the product is considered as non-toxic and safe.
Environment: Experiments made on this and similar products indicate that the product can be considered as of low danger to the environment. However, regulations forbid the disposal of lubricants in the environment without special permit.
Physical-chemical hazards: No particular risk of ignition or explosion.
Specific risks: None known.

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. Consult a doctor if the problems remain.
Ingestion: Drink water or milk. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Extinguishing media recommended: CO₂, 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.

MATERIAL SAFETY DATA SHEET



Storage

Recommended conditions: Storage temperature ± 0 to $+40^{\circ}\text{C}$. Extended storage periods at temperatures below -20 and above $+40^{\circ}\text{C}$ should be avoided. Store in closed container, preferably as delivered. Storage stability is at least 12 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Low viscous oil
Viscosity (40°C): $4.5 \text{ mm}^2/\text{s}$ (cSt)
Viscosity (100°C): $1.9 \text{ mm}^2/\text{s}$ (cSt)
Colour: Yellow
Odour: Vegetable oil related
pH value: Not applicable
Flash point (Closed Cup): $>140^{\circ}\text{C}$
Pour point: Approx. -12°C
Boiling point: Approx. 300°C
Vapour pressure: Negligible under normal conditions
Density (20°C): $878 \text{ kg}/\text{m}^3$
Solubility in water: Insoluble

10. STABILITY AND REACTIVITY

Stability: Stable product under normal conditions.
Hazardous reactions: None known.
Conditions to be avoided: Elevated temperatures ($>>100^{\circ}\text{C}$)
Hazardous decomposition products: None known.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (OECD 401): LD_{50} rat $>2000 \text{ mg}/\text{kg}$
Skin irritation (OECD 404): Not irritating (Index 0/0)
Eye irritation (OECD 405, rabbit): Not irritating

12. ECOLOGICAL INFORMATION

Fish toxicity (OECD 203): $\text{LC}_{50} >100 \text{ mg}/\text{l}$
Acute bacterial toxicity: $\text{EC}_0 >100 \text{ mg}/\text{l}$
Biodegradability: The product is readily biodegradable according to CEC L-33-A-93 (with the result $>95\%$ after 21 days) and OECD 301B, Modified Sturm test (i.e. $>60\%$ after 28 days), as well as OECD Guidelines (ISO 7827-1984).

MATERIAL SAFETY DATA SHEET



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 preferably used as a cleaning and lubricating oil when operating band saws.

Contact: Karl-Erik Lindén
Binol BioSafe OY