

# Material Safety Data Sheet (MSDS) – Cutting Oil

**Product Name:** Cutting Oil (General Purpose)

**Supplier:** Basekim

**Country of Origin:** UAE / Turkey

**Recommended Use:** Metal machining, drilling, milling, turning, grinding operations.

**Product Type:** Straight or soluble cutting oil blend

**Emergency Contact Number:** Local emergency number or Basekim helpline

#### Section 1: Identification

• **Product Name:** Cutting Oil

• Synonyms: Machining Oil, Metalworking Fluid, Coolant Oil

• **Supplier:** Basekim – UAE / Turkey

• Intended Use: Lubrication and cooling during metal cutting and machining operations.

#### Section 2: Hazard Identification

# **Classification (GHS):**

- *Skin Irritation (Category 2)*
- Eye Irritation (Category 2B)
- Aquatic Chronic Toxicity (Category 3)

Signal Word: WARNING

### **Hazard Statements:**

- Causes skin irritation on prolonged contact.
- May cause mild eye irritation.
- Harmful to aquatic life with long-lasting effects.
- Inhalation of mist may cause respiratory irritation.

### **Precautionary Statements:**





- Avoid breathing mist or vapor.
- Wear protective gloves, eye protection, and protective clothing.
- Use only in well-ventilated areas.
- Prevent release to the environment.

#### **Pictograms:**

(Corrosion) (Environment) (Warning)

### Section 3: Composition / Information on Ingredients

Component **CAS Number Concentration (%)** 

Base Oil (SN150-SN500) 64742-54-7 60 - 90%

Sulfurized EP Additives 61789-86-4 5 – 15%

**Chlorinated Paraffins** 63449-39-8 2 - 8%

**Corrosion Inhibitors** Proprietary 1-5%

Biocide (e.g., CMIT/MIT) 55965-84-9 < 0.1%

Antifoam & Emulsifiers Proprietary 0.5 – 3%

**Note:** Concentrations may vary depending on grade and type (straight oil or soluble oil).

#### Section 4: First Aid Measures

#### **Eye Contact:**

- Rinse cautiously with water for 15 minutes.
- Remove contact lenses if present and easy to do.
- Seek medical attention if irritation persists.

### **Skin Contact:**

- Remove contaminated clothing and wash skin with soap and water.
- If irritation develops, seek medical attention.

#### **Inhalation:**

- Move the exposed person to fresh air.
- If symptoms persist, seek medical attention.





#### **Ingestion:**

- Do NOT induce vomiting.
- Rinse mouth with water and seek immediate medical care.

### Section 5: Firefighting Measures

- **Flash Point:** >180°C (Closed Cup)
- Flammable Limits: Not highly flammable but can burn.
- Suitable Extinguishing Media: Foam, CO<sub>2</sub>, dry chemical.
- **Unsuitable Media:** Direct water stream (may spread fire).
- Fire Hazards: Burning may produce toxic fumes including SOx, CO, CO<sub>2</sub>, and
- **PPE for Firefighters:** Self-contained breathing apparatus and full protective gear.

### Section 6: Accidental Release Measures

#### **Personal Precautions:**

- Wear protective gloves and goggles.
- Avoid breathing mist.

#### **Environmental Precautions:**

- Prevent oil from entering drains, waterways, or soil.
- Cutting oil may be harmful to aquatic life.

### **Cleanup Methods:**

- Contain spill with sand, soil, or absorbent material.
- Collect and place into sealed containers for disposal.

### Section 7: Handling and Storage

#### **Handling:**

Use in well-ventilated areas.





- Avoid prolonged skin contact.
- Do not mix with strong oxidizing agents.

### **Storage:**

- Store between  $5^{\circ}\text{C} 40^{\circ}\text{C}$ .
- Keep containers tightly closed and away from direct sunlight.
- Store separately from oxidizers and food products.

### Section 8: Exposure Controls / Personal Protection

### **Hazardous Component Exposure Limit (TWA)**

Mineral Oil Mist 5 mg/m³ (OSHA PEL)
Chlorinated Additives 1 ppm (recommended)

### **Personal Protective Equipment:**

- **Respiratory:** Use mask if mist levels exceed exposure limits.
- Eyes: Safety goggles or face shield.
- **Skin:** Protective gloves and coveralls.
- **Hygiene:** Wash thoroughly after handling.

### Section 9: Physical and Chemical Properties

Property Typical Value

Appearance Amber to brown liquid

Odor Mild petroleum / sulfur

Density @ 15°C (kg/L) 0.870 - 0.890

Viscosity @ 40°C (cSt) 32 – 100 (depending on grade)

Flash Point (°C)  $\geq$ 180 Pour Point (°C) -6 Water Solubility Insoluble pH (soluble type) 8.5 – 9.5

### Section 10: Stability and Reactivity

- Stability: Stable under normal conditions.
- **Reactivity:** Non-reactive except with strong oxidizers.





- **Hazardous Decomposition:** CO, CO<sub>2</sub>, SO<sub>2</sub>, and HCl when burning.
- Conditions to Avoid: Extreme heat, open flame, contamination with water.

### Section 11: Toxicological Information

- Acute Toxicity: Low oral and dermal toxicity.
- **Skin Contact:** Prolonged contact may cause irritation or dermatitis.
- Eve Contact: May cause mild to moderate irritation.
- **Inhalation:** Mist may cause respiratory tract irritation.
- Chronic Effects: Prolonged exposure to chlorinated additives may affect liver and kidneys.

### Section 12: Ecological Information

- Aquatic Toxicity: Harmful to aquatic life with long-term effects.
- **Persistence:** Not readily biodegradable.
- Bioaccumulation: Moderate potential due to mineral oil and chlorinated compounds.

### Section 13: Disposal Considerations

- Dispose of as hazardous industrial waste.
- Do not pour into drains or soil.
- Follow local environmental regulations for cutting oil disposal.

### **Section 14: Transport Information**

ParameterInformationUN NumberNot classifiedProper Shipping Name Cutting Oil

Hazard Class Non-hazardous liquid

Packing Group None

Marine Pollutant Yes (due to additives)



## Section 15: Regulatory Information

- Complies with OSHA, REACH, and GHS labeling guidelines.
- Some additives may require special reporting depending on region.

### Section 16: Other Information

- **Revision Date:** September 2025
- Prepared By: Basekim Technical Team
- **Disclaimer:** This MSDS is provided for safety guidance and compliance. It does not replace proper training or regulatory requirements.