



MATERIAL SAFETY DATA SHEET (MSDS) — Basekim Marine Oil

Product Name: Basekim Marine Oil

Supplier / Manufacturer: Basekim Chemical Production Co., UAE / Turkey

Intended Use: Lubrication for marine engines (cylinder oils, trunk piston engines, auxiliaries), corrosion protection, deposit control, long operating life in sea / salt-air environments.

Emergency Contact: Basekim Technical / Safety Department / Local Emergency Services

Section 1: Identification

Field	Details
Product Identifier	Marine Oil
Synonyms	Marine Engine Lubricant, Cylinder Oil, Trunk Piston Marine Oil
Uses	Lubrication of marine engines, main engines, auxiliaries; corrosion protection; deposit & sludge control.
Supplier	Basekim Chemical Production Co., UAE / Turkey
Website / Reference	Basekim Marine Oil product page Basekim

Section 2: Hazard Identification

GHS Classification (anticipated):

- Skin Irritation – Category 2
- Eye Irritation – Category 2A
- Hazardous to aquatic life – Acute Category 2 / Chronic Category 2
- Aspiration hazard – Category 1 (if swallowed or if oil enters lungs)

Signal Word: WARNING

Hazard Statements:

- Causes skin irritation.
- Causes serious eye irritation.
- May be fatal if swallowed and enters airways.
- Toxic to aquatic life with long lasting effects.



Precautionary Statements:

- Avoid contact with skin and eyes.
- Do not breathe mist or vapour.
- Wear protective gloves, eye protection, and protective clothing.
- If swallowed: Immediately call a POISON CENTER / doctor. Do NOT induce vomiting.
- Prevent release to the environment.

Section 3: Composition / Information on Ingredients

Ingredient	CAS Number	Approx. Concentration (%)	Function / Remarks
Highly refined mineral (hydrocarbon) base oils	64742-54-7 or similar	~ 85-95%	Lubricant base
Detergent / Dispersant additives	proprietary	~ 1-5%	Keeps soot, deposits suspended; protects cleanliness
Corrosion / Anti-rust Inhibitors	proprietary	~ 0.5-5%	Protection in salt & moisture environment
Oxidation / Thermal Stability Additives	proprietary	~0.5-3%	Prevent oil breakdown over long use
Anti-wear Additives	proprietary	< 1-3%	Protect metal surfaces under high load / pressure
Foam Suppressants / Demulsifiers (if needed)	proprietary	<1%	For water separation and to prevent foaming

Exact formulation depends on marine oil grade (e.g. cylinder oil vs trunk piston oil vs auxiliary engine oil).

Section 4: First Aid Measures

- **Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if present. Seek medical advice if irritation persists.
- **Skin Contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation, rash, or other reaction develops, seek medical attention.
- **Inhalation:** Move person into fresh air. If breathing is difficult or symptoms persist, get medical attention.



- **Ingestion:** Do NOT induce vomiting. Rinse mouth. Seek immediate medical assistance. Aspiration into lungs can cause chemical pneumonia.

Section 5: Firefighting Measures

- **Flash Point:** Typically high ($\geq \sim 180-230$ °C depending on grade). *(Fill in your specific value.)*
- **Suitable Extinguishing Media:** Foam, dry chemical powder, CO₂.
- **Unsuitable Media:** High-pressure water stream (may spread burning oil).
- **Hazards from Combustion:** May produce CO, CO₂, smoke, oxides of sulfur or nitrogen, and other toxic fumes.
- **Protective Equipment for Firefighters:** Self-contained breathing apparatus (SCBA), full protective gear.

Section 6: Accidental Release Measures

- **Personal Precautions:** Wear gloves, protective eyewear, and protective clothing. Avoid contact with skin and eyes. Prevent inhalation of mist or vapour.
- **Environmental Precautions:** Prevent entry into drains or waterways. Marine oil can be harmful to aquatic life; oil slicks coat surfaces.
- **Methods for Cleanup:** Contain spill using absorbents (sand, earth, vermiculite). Recover oil as much as possible. Place waste in sealed, labelled containers. Wash contaminated surface with detergent, collect wash-water and dispose of per regulations.

Section 7: Handling and Storage

- **Handling:** Use in well-ventilated areas. Avoid spills and splashes. Minimize generation of mist or vapor. Use clean tools & equipment.
- **Storage:** Store in a cool, dry, well-ventilated area. Protect from heat and open flames. Keep containers tightly closed when not in use. Avoid contamination from water, dirt, or other oils.
- **Storage Temperature Range:** $\sim 5-40$ °C (or as per your oil's spec).
- **Incompatibilities:** Strong oxidizing agents, acids, etc.



Section 8: Exposure Controls / Personal Protection

- **Occupational Exposure Limits (OELs):** For mineral oil mist (if aerosolized), follow local regulatory limits (often around 5 mg/m³ TWA).
- **Engineering Controls:** Local exhaust ventilation, closed systems, avoid generating mist.
- **PPE:**
 - Eye protection: safety goggles or face shield
 - Skin protection: oil-resistant gloves (e.g. nitrile or similar) and protective clothing
 - Respiratory: if mist or vapor exceeds limits, use appropriate respirator
 - Hygiene: wash hands after handling; change out contaminated clothing

Section 9: Physical & Chemical Properties

Property	Typical Value / Range*
Appearance	Clear to light-amber to medium brown liquid
Odor	Mild hydrocarbon / petroleum smell
Density @ 15 °C	~0.88-0.92 g/cm ³ (depends on grade)
Kinematic Viscosity @ 40 °C	~100-200 cSt for cylinder oils; lower for trunk piston or auxiliary oils
Viscosity @ 100 °C	Corresponding lower (e.g. ~10-25 cSt)
Viscosity Index	~90-110+
Flash Point (Closed Cup)	~180-230 °C
Pour Point	e.g. -12 to -20 °C (varies)
Base Number (BN) or Alkalinity	Variable depending on grade (e.g. BN30, BN40, etc.)
Water Separability / Demulsibility	Good performance needed in marine conditions
Oxidation Stability	High resistance to sludge, varnish, deposit formation

These are approximate typical values. Please insert your actual batch test results (COA).

Section 10: Stability and Reactivity

- **Stability:** Stable under normal use and storage.
- **Conditions to Avoid:** Excessive heat, open flame, contamination with water or other incompatible substances, prolonged exposure to air/oxygen at elevated temperature.



- **Incompatible Materials:** Strong oxidizers, acids.
- **Hazardous Decomposition Products:** Under fire or high heat: CO, CO₂, smoke, sulfur oxides, nitrogen oxides, possibly other decomposition products based on additive package.

Section 11: Toxicological Information

- **Acute Toxicity:** Likely low via skin or ingestion for fresh oil; inhalation of mist or vapor can irritate.
- **Skin Contact:** Prolonged or repeated contact may cause dryness, irritation; risk of dermatitis if used oil or contaminated.
- **Eye Contact:** Can cause irritation.
- **Inhalation:** Vapor or mist may irritate respiratory tract.
- **Chronic Effects:** Prolonged exposure may lead to skin sensitization, possible hazards from contaminants or combustion products.

Section 12: Ecological Information

- **Aquatic Toxicity:** Cemented risk; harmful to aquatic organisms; long-term effects likely.
- **Persistence & Degradability:** Base oils are not readily biodegradable; additive package may affect rate. Deposits & sludge may persist.
- **Bioaccumulation:** Some hydrocarbon components may bioaccumulate.
- **Environmental Fate:** Oil film formation on water, sediment binding, soil contamination risk.

Section 13: Disposal Considerations

- Dispose according to local / international environmental regulations.
- Used marine oil may be hazardous waste.
- Do not discharge into drains or environment.
- Collect and dispose of waste oil and contaminated packaging via licensed waste services.



Section 14: Transport Information

- **UN Number:** Determined based on flash point and classification; many marine oils are shipped as non-hazardous unless flash point is low or additive hazard exists.
- **Proper Shipping Name:** Marine Lubricant or Lubricating Oil, N.O.S. (if additives)
- **Hazard Class:** Usually not flammable hazard (if flash point high) → otherwise Class 3 if flammable.
- **Packing Group:** Based on risk classification.
- **Marine Pollutant:** yes, due to potential environmental toxicity.

Section 15: Regulatory Information

- Must comply with GHS labeling, local occupational safety & environmental laws.
- May require documentation for shipping / handling in marine contexts.

Section 16: Other Information

- **Revision Date:** [Insert date]
- **Prepared By:** Basekim Technical / Safety Team
- **Disclaimer:** Information based on known formulations and typical behavior. Actual properties for a specific batch may differ. Users should test and verify in their own systems.