

Material Safety Data Sheet (MSDS)

Tonalide

Revision Date: 22-September-2025

Version: 1.0

Section 1: Product Identification

- **Product Name:** Tonalide
- **Chemical Formula:** C₁₈H₂₆O
- **CAS No:** 1506-02-1
- **Synonyms:** 7-Acetyl-1,1,3,4,4,6-hexamethyl-1,2,3,4-tetrahydronaphthalene; AHTN; Fixolide
- **Recommended Use:** Synthetic musk fragrance ingredient for perfumery, cosmetics, and personal care products.

Section 2: Hazards Identification

- **Classification (GHS):** Aquatic Chronic (Category 2); Skin sensitization (Category 1).
- **Signal Word:** Warning
- **Hazard Statements:**

- May cause an allergic skin reaction
- Toxic to aquatic life with long lasting effects
- **Precautionary Statements:**
 - Avoid breathing dust/vapors
 - Avoid release to the environment
 - Wear protective gloves and eye protection

Section 3: Composition / Information on Ingredients

- **Concentration:** 100%

Section 4: First Aid Measures

- **Inhalation:** Remove to fresh air. Seek medical attention if symptoms occur.
- **Skin Contact:** Wash with plenty of soap and water. Remove contaminated clothing. Seek medical advice if irritation or sensitization occurs.
- **Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Seek medical attention if unwell.

Section 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Dry chemical, foam, carbon dioxide (CO₂); water spray.
- **Specific Hazards:** Combustion produces carbon oxides. Product is combustible.
- **Protective Equipment:** Firefighters should wear self-contained breathing apparatus and protective clothing.

Section 6: Accidental Release Measures

- **Personal Precautions:** Avoid contact with skin and eyes. Ensure adequate ventilation. Use protective equipment.
- **Environmental Precautions:** Prevent release to the environment; very toxic to aquatic organisms.
- **Cleanup Methods:** Absorb with inert material (sand, earth). Collect in suitable container for disposal.

Section 7: Handling and Storage

- **Handling:** Avoid breathing vapors. Avoid skin and eye contact. Use in well-ventilated areas.
- **Storage:** Store in a cool, dry, well-ventilated place. Keep container tightly closed. Protect from heat and light.

Section 8: Exposure Controls / Personal Protection

- **Exposure Limits:** No occupational exposure limits established.
- **Engineering Controls:** Provide adequate ventilation and local exhaust if needed.
- **Personal Protective Equipment:** Chemical-resistant gloves, safety goggles, protective clothing.

Section 9: Physical and Chemical Properties

- **Appearance:** White crystalline powder or flakes
- **Odor:** Musk-like odor
- **Boiling Point:** 325 °C
- **Flash Point:** 100 °C
- **Solubility:** Insoluble in water; soluble in ethanol and oils
- **Molecular Weight:** 258.40 g/mol

Section 10: Stability and Reactivity

- **Stability:** Stable under recommended storage conditions.
- **Incompatible Materials:** Strong oxidizing agents.
- **Hazardous Decomposition Products:** Carbon oxides under fire conditions.

Section 11: Toxicological Information

- **Routes of Exposure:** Inhalation, ingestion, skin and eye contact.
- **Acute Effects:** May cause skin and eye irritation. May cause allergic skin reactions.
- **Chronic Effects:** Prolonged exposure may cause sensitization and environmental persistence.

Section 12: Ecological Information

- **Ecotoxicity:** Toxic to aquatic life with long lasting effects.
- **Persistence and Degradability:** Expected to be persistent in the environment.
- **Bioaccumulative Potential:** High potential due to lipophilic properties.

Section 13: Disposal Considerations

- Dispose of contents/container in accordance with local/regional/national regulations. Do not release into the environment.

Section 14: Transport Information

- **UN Number:** Not regulated
- **Proper Shipping Name:** Tonalide (AHTN)

- **Hazard Class:** Not classified as dangerous goods
- **Packing Group:** Not applicable

Section 15: Regulatory Information

- Complies with Indian chemical safety regulations and listed under international chemical inventories (TSCA, EINECS, etc.).
- Classified as hazardous substance as per GHS.

Section 16: Other Information

- **Disclaimer:** The above information is believed to be correct but does not claim to be exhaustive. Users are responsible for verifying suitability under actual conditions of use. **Triveni chemicals** disclaims any liability for damage resulting from handling or contact.