



Material Safety Data Sheet - Tall Oil Fatty Acid

1. Product Identification

TALL OIL FATTY ACID

2. Supplier

Pine Chemical Group Oy, 10 Tehtaankatu, 00120 Helsinki, Finland

3. Hazard Identification

Product has feebly marked irritating effect on mucous membranes.

4. Emergency and First-Aid Procedures

Ingestion: If swallowed, contact a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by medical personnel.

Eye Contact: Immediately flush eyes with flooding amounts of cool, low-pressure water for at least 15 minutes. If irritation persists, get medical attention. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.

Skin Contact: In case of skin contact, wash immediately with soap and water. If irritation develops or persists, get medical attention. If hot product contacts skin, cool under running water and seek medical attention. Launder contaminated clothing before reuse.

Inhalation: Move person to non-contaminated air. If affected person is not breathing, apply artificial respiration. Seek medical attention.

5. Fire and Explosion Data

Flash Point (Method Used): 205°C (401°F) (Cleveland Open Cup)

Extinguishing Media: Water fog or mist, foam, dry chemical, or carbon dioxide.

Special Firefighting Procedures: Avoid using a direct stream of water, other than light spray.

General Fire Hazards: Product is not considered combustible. If heated above its flash point in the presence of air, product can support combustion. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. If mist is generated, minimum flash point may be reduced.

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Unusual Fire and Explosion Hazards: Toxic gases may be released during fire. Smoke, carbon monoxide, carbon dioxide, water, trace quantities of sulfur oxides, and other products of combustion.

Fire Fighting Equipment: Wear full protective clothing, including self-contained positive pressure or pressure demand breathing apparatus, helmet, and protective clothing. Use water spray to cool fire-exposed containers and to protect personnel.

6. Accidental release measures

Containment: Contain the discharged material. Do not allow product to enter sewer or waterways. Check with local and state environmental agencies for guidance.

Clean-up Procedures: Spills may present a slipping (physical) hazard. Wear appropriate protective equipment and clothing during clean up. Absorb spill with inert material. Shovel material into appropriate container for disposal. Thoroughly wash spill area with water after clean up. **WATER SPILL:** product is regulated as oil under the Clean Water Act. Follow all applicable regulations. Follow all Local, State, Federal and Provincial regulations for disposal.

Evacuation Procedures: Isolate area. Keep unnecessary personnel away. In case of large spills, follow all facility emergency response procedures.

Special Instructions: Remove soiled clothing and laundry before reuse (See Section 8 Storage). Avoid contact with skin and eyes. Avoid inhalation of fumes from hot product.

7. Rules of the reference and storage

Handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid inhalation of mists/vapors/fumes. Keep this product from heat, sparks, or open flame. Do not use air pressure or apply heat with open flame to remove contents of drum. After emptied, drum may retain solid, liquid and/or vapor residues. Continue to observe all precautions on label as if drum were full. Do not cut, puncture, torch or weld on or near the emptied drum. Do not use for other purposes. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.

Storage: Store in clean dry places with central ventilation separately from food and animal feeds. Store far from heat sources. Store far from open flame. Don't smoke in. Prevent access of children and animals. Store at temperatures from +15 to +30°C and atmospheric pressure. Warehouse should provide saving material from direct sunlight, moisture, contamination

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and mechanical damage. Porous material such as clothing, rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.

There aren't additive specific requirements to store conditions.

8. Exposure controls/personal protection

Respiratory protection: Suitable respiratory equipment in case of insufficient ventilation

Hand protection: Protective gloves. PVC

Eye protection: Safety goggles

Skin and body protection: Apron, boots, face shield, or rubber suit may be needed when handling large amounts.

Work: Eyewash stations and safety showers should be readily accessible. Provide local exhaust as needed. Provide general ventilation in processing and storage areas. Self-contained breathing apparatus (SCBA) recommended when fighting fire.

9. Physical/Chemical Properties

Color and odor: Yellow liquid with mild odor of vegetable oil

Viscosity: 30 cP (20°C)

Density: 905 kg/m³ (20°C)

Auto-ignition temperature: 257 °C

Solubility in water: Insoluble

Boiling point: Above 200°C

Melting point: -6°C

Vapor pressure: 0.3 kPa (150°C)

Corrosive properties: Product has corrosive action on carbon steel

10. Stability and chemical activity

Chemical Stability:

This product is stable

Avoid strong oxidizing agents, acids, bases.

Avoid contact with porous materials.

Excessive heating and open flame

Hazardous decomposition products: Carbon dioxide, carbon oxide

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11. Toxicity

Vapor could be making difficult of breathing. During skin contact product can make irritation. During eyes and mucous membranes contact product can make irritation. Product is toxic during per oral injection:

Oleic acid: LD₅₀ oral: = 74 g/kg (rats)

Linoleic acid: LD₅₀ oral: > 3.2 g/kg (rats)

Volatile components of material make irritation on mucous membranes of upper respiratory tract.

12. Environmental protection

It is necessary to avoid contact of substance with drinking sources, on surface of natural water reservoirs in underground water sources and in soil. Biodegradation rate > 80%: 28 days.

The product possesses light toxic action on fishes and water micro flora of natural reservoirs.

13. Disposal considerations

Methods of disposal: Disposal according to local regulations

14. Transport information

Able to be transported by aircrafts, railway wagons and vehicles non specially equipped.

15. Regulatory information

Not classified

16. Additive information

Product should be transported in polyethylene, polypropylene, aluminum or stainless steel containers.

It's necessary to prevent contact of product with water or with unprotected carbon steel as it can make the color of product worse.

Guaranty shelf life – 4 months from date of production. Temperature from +15°C to +30°C.

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