
Material Safety Data Sheet

Product Name	<u>Triacetin</u>
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** Triacetin**Synonyms:** Glycerol triacetate; 1,2,3-Propanetriol triacetate**CAS-No:** 102-76-1**EC-No.:** 203-051-9**Molecular Formula:** C₉H₁₄O₆

REACH Registration No: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

1.2. Relevant identified uses of the substance or mixture and uses advised against:**Recommended Use:** Pharmaceutical excipient, drug, cosmetic raw material**Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad
Email: info@finarchemicals.com
Web: www.finarchemicals.com
- **E-Mail Address** safety@finarchemicals.com; info@finarchemicals.com

1.3. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 - 40040085

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SECTION 2: HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture:****Classification Regulation (EC) No 1272/2008**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2. Label Elements:**Labeling according Regulation (EC) No 1272/2008**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

CAS- No. 102-76-1

2.3. Other Hazards:

None Known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances: Triacetin**

CAS-No: 102-76-1

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Triacetin	102-76-1	203-051-9	>95

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures:****• General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

• If inhaled

Fresh air.

• If Contact with skin

Take off immediately all contaminated clothing. Rinse skin with water/ shower.

• In case of eye contact

Rinse out with plenty of water. Remove contact lenses.

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- **If swallowed**

Immediately make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2. Most important symptoms and effects, both acute and delayed:

We have no description of any symptoms of toxicity.

4.3. Indication of any immediate medical attention and special treatment needed:

No information available

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable Extinguishing Media- Use water, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media- For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Combustible.

Forms explosive mixtures with air on intense heating.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3. Advice for firefighters:

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further Information:

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2. Environmental precautions:

Do not let product enter drains.

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6.3. Methods and material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly.

Clean up affected area.

6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest.

If swallowed then seek immediate medical assistance.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed.

7.3. Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls:

- **Appropriate Engineering Controls:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Personal Protective Equipment:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

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Eye & Face Protection-

Safety goggles

Other Protective equipment-

No data available

Respiratory Protection-

Required when vapours/aerosols are generated.

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

- Environmental Exposure Controls-

Do not let product enter drains. Risk of explosion.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties:**

- **Appearance:** Colorless
- **Physical State:** Liquid
- **Odor:** Weak / Fatty Odor
- **Odor Threshold:** No data available
- **pH:** 5.0 – 6.0 at 50g/l 20°C
- **Melting Point:** ca. - 78°C
- **Critical Temperature:** No data available
- **Vapor Pressure:** <0.1 hPa at 20°C
- **Relative Vapor Density:** 7.52
- **Density:** 1.16 g/cm³ at 20°C
- **Ignition Temperature:** 430°C
- **Volatility:** No data available
- **Bulk Density:** No data available
- **Viscosity, dynamic:** 23 mPa.s at 20°C
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available

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- **Lower Explosion Limit:** 1.1% (V)
- **Upper Explosion Limit:** 7.7% (V)
- **Boiling Point/Range:** 258°C at 1.013 hPa
- **Flash Point:** 138°C
- **Specific Gravity:** No data available
- **Water Solubility:** ca. 64 mg/l at 20°C

9.2. Other information:

- **Molecular Formula:** C₉H₁₄O₆
- **Molecular Weight:** 218.21 g/mol

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2. Chemical stability:

The product is chemically stable under standard ambient conditions (room temperature).

10.3. Possibility of hazardous reactions:

Violent reactions possible with: Strong oxidizing agents

10.4. Conditions to avoid:

Strong Heating.

10.5. Incompatible materials:

No data available

10.6. Hazardous decomposition products:

No data available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute Oral toxicity:

LD50 Rat: > 2,000 mg/kg

OECD Test Guideline 401

Acute Inhalation toxicity:

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LC50 Rat: > 1.72 mg/l; 4 h ; dust/mist

OECD Test Guideline 403

(highest concentration to be prepared)

Acute Dermal toxicity:

LD50 Rabbit: > 5,000 mg/kg

OECD Test Guideline 402

Skin corrosion/irritation:

Rabbit

Result: No irritation

OECD Test Guideline 404

Serious eye damage/eye irritation:

Rabbit

Result: No eye irritation

OECD Test Guideline 405

Respiratory or skin sensitization:

Sensitization test: Guinea pig

Result: negative

(IUCLID)

Germ cell mutagenicity:

Genotoxicity in vitro Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

Mutagenicity (mammal cell test): chromosome aberration.

Chinese hamster lung cells

Method: OECD Test Guideline 473

Carcinogenicity:

No data available

Reproductive toxicity:

No data available

Teratogenicity:

No data available

Specific target organ toxicity - single exposure:

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May cause respiratory irritation.

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

No data available

11.2 Further Information:

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity:**

Toxicity to fish

Semi-static test LC50 *Oryzias latipes* (Orange-red killifish): > 100 mg/l; 96 h

Analytical monitoring: yes

OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Static test EC50 *Daphnia magna* (Water flea): 380 mg/l; 48 h

Analytical monitoring: yes

DIN 38412

Toxicity to algae

Static test ErC50 *Pseudokirchneriella subcapitata* (green algae): > 940 mg/l; 72 h

Analytical monitoring: yes

OECD Test Guideline 201

Static test NOEC *Pseudokirchneriella subcapitata* (green algae): 468 mg/l; 72 h

Analytical monitoring: yes

OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Semi-static test NOEC *Daphnia magna* (Water flea): > 94 mg/l; 21 d

Analytical monitoring: yes

OECD Test Guideline 211

12.2 Persistence and degradability:

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Biodegradability
 64%; 28 d; aerobic
 OECD Test Guideline 301B
 Readily biodegradable

12.3 Bioaccumulate potential:

Partition coefficient: n-octanol/water: log Pow: 0.25
 (experimental)
 (Lit.) Bioaccumulation is not expected.

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects:

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
 Handle uncleaned containers like the product itself.

SECTION 14: Transport information

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	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	Not classified as dangerous in the meaning of transport regulations.		
14.2 Proper shipping name	Not classified as dangerous in the meaning of transport regulations.		
14.3 Class	Not classified as dangerous in the meaning of transport regulations.		
14.4 Packing group	Not classified as dangerous in the meaning of transport regulations.		
14.5 Environmentally hazardous	Not classified as dangerous in the meaning of transport regulations.		
14.6 Special precautions for user	Not classified as dangerous in the meaning of transport regulations.		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			
Not Relevant			

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

National Legislation
Storage class 10 - 13

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Training advice:

Provide adequate information, instruction and training for operators.

References: Not available

Created: 07/07/2020

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