



Safety Data Sheet: Alternariol

1) Identification of the substance/mixture and of the Company

Product identifiers

| Product name | Alternariol | EC Number | N.A. |
|------------------------|-------------|------------------|--|
| Product Code | АОН | Formula | C ₁₄ H ₁₀ O ₅ |
| Pure substance/mixture | Substance | Molecular weight | 258.24 |
| CAS # | 641-38-3 | RTECS | HP8757000 |
| | | | |

Intended uses of the substance or mixture and uses advised against

| Intended use | | Uses advised against: |
|---|--|--|
| Only for Research and/or Development | | Not for drug, Not to be used in humans or animals. Not food additive |
| Details of the supplier of the safety data sheet | | Emergency Telephone number |
| FERMENTEK Itd 4 Yatziv street, POB 47120 Jerusalem 97800, Israel | Tel: +972 2 5853953 Fax: +972 2 5853943 eMail: fermentek@fermentek.com Website: www.fermentek.com | For chemical emergency spill, leak, fire, exposure, or accident calls CHEMTREC day or night: Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 |
| This company is the manufacturer of the product, and the supplier | | |

of the safety data sheet

REACH

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

2) Hazards identification

Classification of the substance or mixture

GHS Classification:

Reproductive toxicityCat. 2H360:May damage fertility or the unborn child

GHS Label elements, including precautionary statements

Contains Alternariol

| Pictogram: GHS Hazard Stat | Signal word: {warning} ements | |
|-------------------------------|--|--|
| H360 | May damage fertility or the unborn child | |
| H302+H312+H332 | Harmful if swallowed, in contact with skin or if inhaled | |
| GHS Precautionary Statements | | |
| P261: | Avoid breathing dust/fumes/gas/mist/vapours/spray. | |
| P263: | Avoid contact during pregnancy/while nursing. | |



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3) Composition/information on ingredients

| Substance | • |
|-----------|---|
|-----------|---|

| Jubstance | |
|----------------------------------|--------------|
| Substance name: | Alternariol |
| CAS Registry | 641-38-3 |
| EC number#: | N.A. |
| Molecular Formula: | С14Н10О5 |
| Molecular Weight: | 258.2 |
| Concentration (weight/weight) | > 98% |
| Mixture | Not mixture. |

4) First Aid Measures

Description of First Aid Measures General advice: If medical attention is required, show this safety data sheet to the doctor. Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Skin Contact: Immediate medical attention is required. Wash off immediately with soap and plenty of. water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Do NOT induce vomiting. Call a physician or poison control center immediately. Never give Ingestion: anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician Inhalation: Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Call a physician Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure Self-protection of the first that medical personnel are aware of the material(s) involved, take precautions to protect aider: themselves and prevent spread of contamination. No information is available Symptoms and effects: Treat symptomatically Note to physicians:

5) Fire-fighting measures

Extinguishing media

| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
|--------------------------------|---|
| Unsuitable extinguishing media | None |
| Hazardous combustion products | Carbon oxides |
| Advice for firefighters | Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit. |

6) Accidental release measures

Personal precautions, protective equipment and emergency procedures Personal precautions Use personal protective equipment as results of the personal personal protective equipment as results of the personal personal

Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

| Environmental precautions | |
|---------------------------|--|
| Environmental precautions | |

Prevent further leakage or spillage if safe to do so. Prevent product from

entering drains.

Methods and material for containment and cleaning up



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| Methods for containment: | Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal. |
|--------------------------|--|
| Methods for cleaning up: | Cover liquid spill with sand, earth or other non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, and vermiculite). Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal. |

7) Handling and storage

Precautions for safe handling

| Advice on safe handling: | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. |
|--------------------------------------|---|
| Conditions for safe storage, include | ding any incompatibilities |
| Storage Conditions: | Keep container tightly closed in a dry and well-ventilated place. |
| | Keep out of the reach of children. |
| | Store at -20 °C. |
| Incompatible materials: | None known based on information available. |

8) Exposure Controls/Personal Protection

No occupational exposure limits are listed for this material.

| OSHA Permissible Exposure Limits | No Data Available |
|-----------------------------------|-------------------|
| NIOSH Recommended Exposure Limits | No Data Available |
| ACGIH Threshold Limit Values | No Data Available |

Exposure controls

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations, Ventilation systems

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Use fumehood for routine work.

Personal protective equipment

The employer/end user, prior to use of this product should perform all recommendations below are advisory in nature and a risk assessment. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

[PPE=Personal Protection Equipment]

| PPE: Respiratory protection | Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
|--------------------------------|--|
| PPE: Hand Protection: | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands |
| PPE: Eye Protection: | Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU) |
| PPE: Skin and Body Protection: | Handle with gloves. Wear protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. When deemed needed according to the concentration and amount of this product, use a complete body suit |



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9) Physical and chemical properties

Physical / chemical properties

| Physical State at room temperature | Solid / powder |
|---|----------------|
| Color | white |
| Volatile? | No |
| No further safety-relevant information is available | |

10) Stability and reactivity

| | / |
|------------------------------------|------------------------------------|
| Reactivity: | No information available. |
| Chemical stability: | Stable under normal conditions. |
| Conditions to avoid | Heat, flames and sparks. Sunlight. |
| Incompatible materials | Strong reducers and exidizers |
| Possibility of Hazardous Reactions | None under normal processing |
| Hazardous decomposition products: | Carbon oxides |

11) Toxicological information

Information on toxicological effects

The toxicological effects of this product have not been thoroughly studied Some other SDS vendors might have classified this product as very toxic. (To our opinion, with insufficient support).

| Acute Toxicity | Alternariol possesses very weak acute toxicity. |
|--|---|
| LD50 (oral) | No toxic effects occurred after feeding with alternariol up to 24 mg/kg for 21 days. (Encyclopedia of food mycotoxins) |
| Skin corrosion/irritation: | No data available |
| Serious eye damage/eye irritation: | No data available |
| Respiratory or skin sensitization: | No data available |
| Germ cell mutagenicity: | Possible human mutagen (Based on cell culture experiments) |
| Carcinogenicity: | Not classified by ACGIH, IARC, NIOSH, NTP, or OSHA |
| Reproductive toxicity / Teratogenicity: | Fetotoxicity; teratogenicity at 200 mg/kg in mice, intraperitoneal. Same dose caused death of part of the mice (Encyclopedia of food mycotoxins) |
| Aspiration hazard: | No data available |
| Signs and Symptoms of Exposure | No information available. |
| Additional information: | RTECS: HP8757000 |

12) Ecological Information

| Eco-Toxicity | No further relevant information available |
|-----------------------|--|
| Other adverse effects | No further relevant information available. |

13) Disposal Considerations

| Waste treatment methods | | |
|---------------------------------------|---|--|
| Waste from residues / unused products | Dispose of in accordance with local regulations | |
| Contaminated packaging | Dispose of as unused product | |
| | | |

14) Transport information

UN number, Proper Shipping Name, Transport Hazard Class, packing group

| • | | • | | • |
|---|--------|----------|-------|------|
| | US DOT | ADR/RID: | IMDG: | ΙΑΤΑ |



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| UN Number UN proper shipping name | 3462 Toxins, extracted from living sources, solid, n.o.s. (Aflatoxicol) |
|--------------------------------------|---|---|---|---|
| Transport Hazard Class | 6.1 | 6.1 | 6.1 | 6.1 |
| & Packing Group | Pg III | Pg III | Pg III | Pg III |

15) Regulatory information

| Safety, health and environmental | l regulations/legislation |
|----------------------------------|---------------------------|
|----------------------------------|---------------------------|

| USA EPA / TSCA | This product is not listed on the USA EPA TSCA |
|---------------------|---|
| EU ECHA Status | This product is not registered with the EU ECHA |
| CA: DSL/NDSL Status | This product is not listed on the Canadian DSL/NDSL |

16) Other information

Date of revision: 03 September 2017

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given here is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Some other SDS vendors might have classified this product as very toxic. (To our opinion, with insufficient support). End of SDS



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