

ALFAAL11485

## 5,7-Dodecadiyne-1,12-diol

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| 产品说明:                      | 5,7-十二烷二炔-1,12-二醇, 96%  |
|----------------------------|---|
| Product Description:       | 5,7-Dodecadiyne-1,12-diol   |
| Cat No. :                  | <b>L11485</b>   |
| CAS No                     | 74602-32-7  |
| Molecular Formula          | C12 H18 O2  |
| Supplier                   | Avocado Research Chemicals Ltd.<br>(Part of Thermo Fisher Scientific)<br>Shore Road, Heysham<br>Lancashire, LA3 2XY,<br>United Kingdom<br>Office Tel: +44 (0) 1524 850506<br>Office Fax: +44 (0) 1524 850608  |
| Emergency Telephone Number | For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11<br>Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99<br><b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 001-703-527-3887 |
| E-mail address             | begel.sdsdesk@thermofisher.com  |
| Recommended Use            | Laboratory chemicals.   |
| Uses advised against       | No Information available  |

## **SECTION 2. HAZARD IDENTIFICATION**

| Physical | State |
|----------|-------|
| Solid    | b     |

Appearance Yellow Odor No information available

## **Emergency Overview**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### <u>Classification of the substance or mixture</u> Based on available data, the classification criteria are not met

#### Label Elements

None required

#### Physical and Chemical Hazards None identified. Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

## **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component                 | CAS No     | Weight % |
|---------------------------|------------|----------|
| 5,7-Dodecadiyne-1,12-diol | 74602-32-7 | <=100    |

## **SECTION 4. FIRST AID MEASURES**

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

#### Self-Protection of the First Aider

No special precautions required.

#### Notes to Physician

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

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Refer to protective measures listed in Sections 8 and 13.

## SECTION 7. HANDLING AND STORAGE

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

#### Specific Use(s)

Use in laboratories

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### Exposure Controls

#### Engineering Measures

None under normal use conditions. .

#### Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

| Glove material<br>Nitrile rubber<br>Neoprene<br>Natural rubber<br>PVC | Breakthrough time<br>See manufacturers<br>recommendations | Glove thickness<br>- | EU standard<br>EN 374 | Glove comments<br>(minimum requirement) |
|---|---|----------------------|-----------------------|---|
|---|---|----------------------|-----------------------|---|

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

| Skin and body protection   | Long sleeved clothing   |
|----------------------------|---|
| Respiratory Protection     | No protective equipment is needed under normal use conditions.  |
| Large scale/emergency use  | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> Particle filter |
| Small scale/Laboratory use | Maintain adequate ventilation   |

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## **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

No information available.

| Appearance<br>Physical State  | Yellow<br>Solid  |   |
|---|--|---|
| Odor<br>Odor Threshold<br>pH<br>Melting Point/Range<br>Softening Point<br>Boiling Point/Range<br>Flash Point<br>Evaporation Rate<br>Flammability (solid,gas)<br>Explosion Limits  | No information available<br>No data available<br>No information available<br>49 - 51 °C / 120.2 - 123.8 °F<br>No data available<br>No information available<br>No information available<br>Not applicable<br>No information available<br>No data available               | <b>Method -</b> No information available<br>Solid |
| Vapor Pressure<br>Vapor Density<br>Specific Gravity / Density<br>Bulk Density<br>Water Solubility<br>Solubility in other solvents<br>Partition Coefficient (n-octanol/wat<br>Autoignition Temperature<br>Decomposition Temperature<br>Viscosity<br>Explosive Properties<br>Oxidizing Properties | No data available<br>Not applicable<br>No data available<br>No data available<br>No information available<br>No information available<br><b>ter)</b><br>No data available<br>No data available<br>Not applicable<br>No information available<br>No information available | Solid   |
| Molecular Formula<br>Molecular Weight   | C12 H18 O2<br>194.28   |   |

## SECTION 10. STABILITY AND REACTIVITY

| Stability                                       | Stable under normal conditions.                            |
|---|--|
| Hazardous Reactions<br>Hazardous Polymerization | None under normal processing.<br>No information available. |
| Conditions to Avoid                             | None known.  |
| Materials to avoid                              | No information available.                                  |

Hazardous Decomposition Products None under normal use conditions.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** 

(a) acute toxicity;

(b) skin corrosion/irritation; No data available

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| (a) aprious aux demogra/irritation   | No dete queileble  |
|--|--|
| (c) serious eye damage/irritation;   | No data available  |
| (d) respiratory or skin sensitization;   |  |
| Respiratory  | No data available  |
| Skin   | No data available  |
|  |  |
| (e) germ cell mutagenicity;  | No data available  |
| (f) ecreine conjeitur  | No data available  |
| (f) carcinogenicity;   | no data avaliable  |
|  | There are no known carcinogenic chemicals in this product  |
|  |  |
|  |  |
| (g) reproductive toxicity;   | No data available  |
|  |  |
| (h) STOT-single exposure;  | No data available  |
|  |  |
|  |  |
| (i) STOT-repeated exposure;  | No data available  |
|  |  |
| Target Organs  | No information available.  |
|  |  |
| (j) aspiration hazard;   | Not applicable   |
|  | Solid  |
| Symptoms / effects,both acute and  | No information available   |
| delayed  |  |
|  |  |
|  | SECTION 12. ECOLOGICAL INFORMATION   |
|  |  |
|  |  |
| Ecotoxicity effects  | Contains no substances known to be hazardous to the environment or that are not  |
| Ecotoxicity effects  |  |
| Ecotoxicity effects  | Contains no substances known to be hazardous to the environment or that are not  |
| Ecotoxicity effects  | Contains no substances known to be hazardous to the environment or that are not  |
|  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.  |
| Ecotoxicity effects<br>Persistence and Degradability   | Contains no substances known to be hazardous to the environment or that are not  |
| Persistence and Degradability  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available  |
|  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.  |
| Persistence and Degradability  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available  |
| Persistence and Degradability  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available  |
| Persistence and Degradability  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available  |
| Persistence and Degradability<br>Bioaccumulative Potential   | Contains no substances known to be hazardous to the environment or that are not<br>degradable in waste water treatment plants.<br>No information available<br>No information available   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available<br>No information available<br>No information available<br>This product does not contain any known or suspected endocrine disruptors   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available<br>No information available<br>No information available<br>This product does not contain any known or suspected endocrine disruptors<br>This product does not contain any known or suspected substance   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available<br>No information available<br>No information available<br>This product does not contain any known or suspected endocrine disruptors   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance  |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.<br>No information available<br>No information available<br>No information available<br>This product does not contain any known or suspected endocrine disruptors<br>This product does not contain any known or suspected substance   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential   | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance SECTION 13. DISPOSAL CONSIDERATIONS   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential<br>Waste from Residues/Unused             | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance Chemical waste generators must determine whether a discarded chemical is classified as a  |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential   | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance SECTION 13. DISPOSAL CONSIDERATIONS Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential<br>Waste from Residues/Unused             | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance Chemical waste generators must determine whether a discarded chemical is classified as a  |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential<br>Waste from Residues/Unused             | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance SECTION 13. DISPOSAL CONSIDERATIONS Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential<br>Waste from Residues/Unused<br>Products | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance SECTION 13. DISPOSAL CONSIDERATIONS Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.   |
| Persistence and Degradability<br>Bioaccumulative Potential<br>Mobility in soil<br>Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion Potential<br>Waste from Residues/Unused<br>Products | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use |

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**Other Information** Waste codes should be assigned by the user based on the application for which the product was used. **SECTION 14. TRANSPORT INFORMATION** Road and Rail Transport Not Regulated IMDG/IMO Not regulated <u>IATA</u> Not regulated **Special Precautions for User** No special precautions required

## **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component                     | The | List of                                  | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|-------------------------------|-----|--|------|-------|--------|------|-----|-------|------|------|------|------|
|                               |     | dangerous<br>goods GB<br>12268 -<br>2012 |      |       |        |      |     |       |      |      |      |      |
| 5,7-Dodecadiyne-1,12-<br>diol | -   | -  |      | -     | -      | -    | Х   | -     | -    |      | -    | -    |

#### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

| Prepared By      | Health, Safety and Environmental Department        |
|------------------|--|
| Revision Date    | 02-May-2024  |
| Revision Summary | New emergency telephone response service provider. |

#### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

## Legend

| CAS - Chemical Abstracts Service  | <b>TSCA</b> - United States Toxic Substances Control Act Section 8(b)   |  |
|---|---|--|
| <b>EINECS/ELINCS</b> - European Inventory of Existing Commercial Chemical<br>Substances/EU List of Notified Chemical Substances<br><b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances<br><b>IECSC</b> - Chinese Inventory of Existing Chemical Substances<br><b>KECL</b> - Korean Existing and Evaluated Chemical Substances | Inventory<br>DSL/NDSL - Canadian Domestic Substances List/Non-Domestic<br>Substances List<br>ENCS - Japanese Existing and New Chemical Substances<br>AICS - Australian Inventory of Chemical Substances<br>NZIOC - New Zealand Inventory of Chemicals |  |
| WEL - Workplace Exposure Limit  | TWA - Time Weighted Average   |  |

ACGIH - American Conference of Governmental Industrial Hygienists

JU

IARC - International Agency for Research on Cancer

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DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development **BCF** - Bioconcentration factor

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

## 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 is designed only as a 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

## **End of Safety Data Sheet**