

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Revision Date 05-Feb-2024

**Revision Number** 3

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

#### 1.1. Product identifier

| Product Description:      | Methyl 3-methyl-2-furoate                    |
|---------------------------|--|
| Cat No. :                 | A10541                                       |
| Synonyms                  | 3-Methylfuran-2-carboxylic acid methyl ester |
| CAS No                    | 6141-57-7                                    |
| Molecular Formula         | C7 H8 O3                                     |
| REACH registration number | -  |

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

| Recommended Use      | Laboratory chemicals.    |
|----------------------|--------------------------|
| Uses advised against | No Information available |

#### 1.3. Details of the supplier of the safety data sheet

Company

Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

E-mail address

#### begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

Based on available data, the classification criteria are not met

#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

#### 2.2. Label elements

None required

#### 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substances

| Component                 | CAS No    | EC No             | Weight % | CLP Classification - According to<br>GB-CLP Regulations UK SI 2019/720 and<br>UK SI 2020/1567 |
|---------------------------|-----------|-------------------|----------|---|
| Methyl 3-methyl-2-furoate | 6141-57-7 | EEC No. 228-131-0 | 98       | -   |

#### **REACH registration number**

Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

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#### 4.1. Description of 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. |  |  |  |
| Ingestion  | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.                   |  |  |  |
| Inhalation   | Remove to fresh air. Get medical attention immediately if symptoms occur.   |  |  |  |
| Self-Protection of the First Aider                               | No special precautions required.  |  |  |  |
| 4.2. Most important symptoms and effects, both acute and delayed |   |  |  |  |
|  | None reasonably foreseeable.  |  |  |  |

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

## **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

## Extinguishing media which must not be used for safety reasons No information available.

#### 5.2. Special hazards arising from the substance or mixture

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

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

#### 5.3. Advice 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**

#### 6.1. Personal precautions, protective equipment and emergency procedures

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

#### 6.2. Environmental precautions

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

#### 6.3. Methods and material for containment and cleaning up

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

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

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

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

#### 7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510Class 11Storage Class (LGK) (Germany)

#### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

#### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

Predicted No Effect Concentration (PNEC) No information available.

#### 8.2. Exposure controls

#### **Engineering Measures**

None under normal use conditions.

| Personal protective eq<br>Eye Protection            |                                   | fety glasses with side | e shields (or goggles) | (European standard - EN 166) |  |  |
|---|-----------------------------------|------------------------|------------------------|------------------------------|--|--|
| Hand Protection                                     | Protectiv                         | Protective gloves      |                        |                              |  |  |
| Glove material                                      | Breakthrough time                 | Glove thickness        | EU standard            | Glove comments               |  |  |
| Nitrile rubber<br>Neoprene<br>Natural rubber<br>PVC | See manufacturers recommendations | -                      | EN 374                 | (minimum requirement)        |  |  |

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

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.

**Respiratory Protection** 

No protective equipment is needed under normal use conditions.

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| 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   |

Environmental exposure controls No information available.

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

#### 9.1. Information on basic physical and chemical properties

| Physical State   | Solid   |                                   |
|--|---|-----------------------------------|
| Appearance<br>Odor<br>Odor Threshold<br>Melting Point/Range<br>Softening Point<br>Boiling Point/Range<br>Flammability (liquid)<br>Flammability (solid,gas)<br>Explosion Limits | White<br>No information available<br>No data available<br>32 - 36 °C / 89.6 - 96.8 °F<br>No data available<br>60 °C / 140 °F<br>Not applicable<br>No information available<br>No data available | @ 1 mmHg<br>Solid                 |
| Flash Point<br>Autoignition Temperature<br>Decomposition Temperature<br>pH   | No information available<br>No data available<br>No data available<br>No information available  | Method - No information available |
| Viscosity<br>Water Solubility<br>Solubility in other solvents<br>Partition Coefficient (n-octanol/wate   | Not applicable<br>No information available<br>No information available  | Solid                             |
| Vapor Pressure<br>Density / Specific Gravity<br>Bulk Density<br>Vapor Density<br>Particle characteristics  | No data available<br>No data available<br>No data available<br>Not applicable<br>No data available  | Solid                             |
| 9.2. Other information   |   |                                   |
| Molecular Formula<br>Molecular Weight  | C7 H8 O3<br>140.14  |                                   |

## **SECTION 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

**Evaporation Rate** 

None known, based on information available

#### 10.2. Chemical stability

Stable under normal conditions.

Not applicable - Solid

10.3. Possibility of hazardous reactions

| Hazardous Polymerization | No information available.     |
|--------------------------|-------------------------------|
| Hazardous Reactions      | None under normal processing. |

10.4. Conditions to avoid

Incompatible products.

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#### 10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

#### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| Product Information   | No acute toxicity information is available for this product                                |
|---|--|
| (a) acute toxicity;<br>Oral<br>Dermal<br>Inhalation           | No data available<br>No data available<br>No data available                                |
| (b) skin corrosion/irritation;                                | No data available  |
| (c) serious eye damage/irritation;                            | No data available  |
| (d) respiratory or skin sensitization;<br>Respiratory<br>Skin | No data available<br>No data available   |
| (e) germ cell mutagenicity;                                   | No data available  |
| (f) carcinogenicity;  | No data available  |
|   | 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<br>Solid  |
| Other Adverse Effects   | The toxicological properties have not been fully investigated.                             |
| Symptoms / effects,both acute and delayed                     | No information available.  |
| 11.2. Information on other hazards                            |  |
| Endocrine Disrupting Properties                               | Assess endocrine disrupting properties for human health. This product does not contain any |

known or suspected endocrine disruptors.

### **SECTION 12: ECOLOGICAL INFORMATION**

| <u>12.1. Toxicity</u><br>Ecotoxicity effects   | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.   |  |  |  |  |
|--|---|--|--|--|--|
| 12.2. Persistence and degradability<br>Persistence                                       | No information available<br>Persistence is unlikely, based on information available.  |  |  |  |  |
| 12.3. Bioaccumulative potential  | Bioaccumulation is unlikely   |  |  |  |  |
| <u>12.4. Mobility in soil</u>  | The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in air                                |  |  |  |  |
| 12.5. Results of PBT and vPvB<br>assessment  | No data available for assessment.   |  |  |  |  |
| <u>12.6. Endocrine disrupting</u><br>properties<br>Endocrine Disruptor Information       | This product does not contain any known or suspected endocrine disruptors   |  |  |  |  |
| 12.7. Other adverse effects<br>Persistent Organic Pollutant<br>Ozone Depletion Potential | This product does not contain any known or suspected substance<br>This product does not contain any known or suspected substance  |  |  |  |  |
| SE   | CTION 13: DISPOSAL CONSIDERATIONS   |  |  |  |  |
| 13.1. Waste treatment methods  |   |  |  |  |  |
| Waste from Residues/Unused<br>Products   | 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. |  |  |  |  |
| Contaminated Packaging   | Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.  |  |  |  |  |

Other InformationWaste codes should be assigned by the user based on the application for which the product<br/>was used.

According to the European Waste Catalog, Waste Codes are not product specific, but

## SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not regulated

14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es)

European Waste Catalogue (EWC)

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| 14.4. Packing group   |                                  |
|---|----------------------------------|
| ADR   | Not regulated                    |
| <u>14.1. UN number</u><br><u>14.2. UN proper shipping name</u><br><u>14.3. Transport hazard class(es)</u><br><u>14.4. Packing group</u> |                                  |
| IATA  | Not regulated                    |
| <u>14.1. UN number</u><br><u>14.2. UN proper shipping name</u><br><u>14.3. Transport hazard class(es)</u><br><u>14.4. Packing group</u> |                                  |
| 14.5. Environmental hazards   | No hazards identified            |
| 14.6. Special precautions for user  | No special precautions required. |
| 14.7. Maritime transport in bulk according to IMO instruments   | Not applicable, packaged goods   |

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Methyl 3-methyl-2-furoate 6141-57-7 228-131-0 X | Component                 | CAS No | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|---|---------------------------|--------|-----------|--------|-----|-------|------|------|------|------|
|   | Methyl 3-methyl-2-furoate |        | 228-131-0 | -      | -   | -     | -    | -    | -    | Х    |

**SECTION 15: REGULATORY INFORMATION** 

| Component                 | CAS No    | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---------------------------|-----------|------|---|-----|------|------|-------|-------|
| Methyl 3-methyl-2-furoate | 6141-57-7 | -    | -   | -   | -    | -    | -     | -     |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### Authorisation/Restrictions according to EU REACH Not applicable

| Component                 | CAS No    | REACH (1907/2006) -<br>Annex XIV - Substances<br>Subject to Authorization | <b>.</b> | REACH Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC) |
|---------------------------|-----------|---|----------|---|
| Methyl 3-methyl-2-furoate | 6141-57-7 | -   | -        | -   |

#### Seveso III Directive (2012/18/EC)

| Component                 | CAS No    | Seveso III Directive (2012/18/EC) -      | Seveso III Directive (2012/18/EC) -     |  |
|---------------------------|-----------|--|---|--|
|                           |           | Qualifying Quantities for Major Accident | Qualifying Quantities for Safety Report |  |
|                           |           | Notification                             | Requirements                            |  |
| Methyl 3-methyl-2-furoate | 6141-57-7 | Not applicable                           | Not applicable                          |  |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

#### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 3 (self classification)

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

#### **SECTION 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3

#### Legend

| CAS - Chemical Abstracts Service  | <b>TSCA</b> - United States Toxic Substances Control Act Section 8(b)<br>Inventory |
|---|--|
| EINECS/ELINCS - European Inventory of Existing Commercial Chemical        |  |
| Substances/EU List of Notified Chemical Substances                        | Substances List  |
| <b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances | ENCS - Japanese Existing and New Chemical Substances                               |
| IECSC - Chinese Inventory of Existing Chemical Substances                 | AICS - Australian Inventory of Chemical Substances                                 |
| <b>KECL</b> - Korean Existing and Evaluated Chemical Substances           | NZIOC - New Zealand Inventory of Chemicals   |
| WEL - Workplace Exposure Limit  | TWA - Time Weighted Average  |
| ACGIH - American Conference of Governmental Industrial Hygienists         | IARC - International Agency for Research on Cancer                                 |
| DNEL - Derived No Effect Level  | Predicted No Effect Concentration (PNEC)   |
| RPE - Respiratory Protective Equipment                                    | LD50 - Lethal Dose 50%   |
| LC50 - Lethal Concentration 50%   | EC50 - Effective Concentration 50%   |
| NOEC - No Observed Effect Concentration                                   | POW - Partition coefficient Octanol:Water  |
| <b>PBT</b> - Persistent, Bioaccumulative, Toxic                           | vPvB - very Persistent, very Bioaccumulative                                       |
| ADR - European Agreement Concerning the International Carriage of         | ICAO/IATA - International Civil Aviation Organization/International Air            |
| Dangerous Goods by Road   | Transport Association  |
| IMO/IMDG - International Maritime Organization/International Maritime     | MARPOL - International Convention for the Prevention of Pollution from             |
| Dangerous Goods Code  | Ships  |
| OECD - Organisation for Economic Co-operation and Development             | ATE - Acute Toxicity Estimate  |
| BCF - Bioconcentration factor   | VOC - (Volatile Organic Compound)  |
| Key literature references and sources for data                            |  |
| https://echa.europa.eu/information-on-chemicals                           |  |
| Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, R           | TECS   |

#### **Training Advice**

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

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New emergency telephone response service provider.

## This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

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**