

SAFETY DATA SHEET

| Version: | 1.1 |
|----------------|------------|
| Revision Date: | 2022-09-07 |
| Print Date: | 2022-09-07 |

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

| Product Number: | M0011 |
|------------------|-------------------------------|
| Product name: | 4-Methylumbelliferyl butyrate |
| CAS Registry Nr: | 17695-46-4 |

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

Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

| Company: | Chemodex AG |
|----------|---------------------------|
| | CH - 9000 St. Gallen |
| | Switzerland, Europe |
| | Tel: +41 71 244 48 25 |
| | Fax: +41 71 244 48 26 |
| | Email: info@chemodex.com |
| | Website: www.chemodex.com |

1.4 Emergency telephone number

| Tox Info Suisse: |
|------------------|
|------------------|

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

| Synonyms: | MU-Bu |
|-------------------|--------------|
| Mol. Formula: | C14H14O4 |
| Mol. Weight: | 246.26 g/mol |
| CAS Registry No.: | 17695-46-4 |
| EC-No.: | 241-694-7 |

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures

General industrial hygiene practice. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Protect from light and moisture. Store at +4°C. Storage class (TRGS 510): 13: Non Combustible Solids

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

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

| a) | Appearance: | Color: White Form: Fluffy powder |
|----|--|-------------------------------------|
| b) | Odour: | No data available |
| c) | Odour Threshold: | No data available |
| d) | pH: | No data available |
| e) | Melting point/freezing point: | 90-92 °C |
| f) | Initial boiling point and boiling range: | No data available |
| g) | Flash point: | No data available |
| h) | Evaporation rate: | No data available |
| i) | Flammability (solid, gas): | No data available |
| j) | Upper/lower flammability or | |
| | explosive limits: | No data available |
| k) | Vapour pressure: | No data available |
| I) | Vapour density: | No data available |
| m) | Relative density: | No data available |
| n) | Water solubility: | No data available |
| o) | Partition coefficient (n- octanol/water): | No data available |
| p) | Auto-ignition temperature: | No data available |
| q) | Decomposition temperature: | No data available |
| r) | Viscosity: | No data available |
| s) | Explosive properties: | No data available |
| t) | Oxidizing properties: | No data available |

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable for at least 2 years under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

| 11.1 | Information | on toxico | logical | effects |
|------|-------------|-----------|---------|---------|
|------|-------------|-----------|---------|---------|

| Acute toxic | sity | | | | |
|-------------------------------|---|--|--|--|--|
| Oral: No da | ta available | | | | |
| Inhalation: No data available | | | | | |
| Dermal: No | Dermal: No data available | | | | |
| Skin corros | sion/irritation | | | | |
| No data ava | ailable | | | | |
| Serious ey | e damage/eye irritation | | | | |
| No data ava | ailable | | | | |
| Respirator | y or skin sensitisation | | | | |
| No data ava | ailable | | | | |
| Germ cell r | nutagenicity | | | | |
| No data ava | ailable | | | | |
| Carcinoge | nicity | | | | |
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified | | | | |
| | as probable, possible or confirmed human carcinogen by IARC. | | | | |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified | | | | |
| | as a carcinogen or potential carcinogen by ACGIH. | | | | |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified | | | | |
| | as a known or anticipated carcinogen by NTP. | | | | |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. | | | | |
| Reproduct | ive toxicity | | | | |
| No data ava | ailable | | | | |
| Specific ta | rget organ toxicity - single exposure | | | | |
| No data ava | ailable | | | | |
| Specific ta | rget organ toxicity - repeated exposure | | | | |
| No data available | | | | | |
| Aspiration | hazard | | | | |
| No data ava | ailable | | | | |
| Additional | Information | | | | |
| RTECS: No | t available | | | | |
| | | | | | |

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

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

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

| DOT (US) | | |
|-----------------------------------|--|--|
| Not dangerous goods | | |
| | | |
| IMDG | | |
| Not dangerous goods | | |
| | | |
| ΙΑΤΑ | | |
| Not dangerous goods | | |
| 14.6 Special precautions for user | | |

No data available

SECTION 15: Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

4-Methyl-2-oxo-2H-1-benzopyran-7-yl butyrate CAS-No. 17695-46-4

New Jersey Right To Know Components

4-Methyl-2-oxo-2H-1-benzopyran-7-yl butyrate CAS-No. 17695-46-4

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information

Further information

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