SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 5.6 Revision Date 06/02/2016 Print Date 11/10/2018

1. PRODUCT AND COMPANY IDENTIFICATION

| 1.1 | Product identifiers Product name | : | 2-Methylbutyl acetate |
|-----|-------------------------------------|-------|---|
| | Product Number | : | W364401 |
| | Brand | : | Aldrich |
| | Index-No. | : | 607-130-00-2 |
| 1.2 | CAS-No. | : | 624-41-9 |
| | Relevant identified uses of | f the | e substance or mixture and uses advised against |

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

| Company | : | Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA |
|------------------|---|--|
| Telephone Fax | : | +1 800-325-5832 +1 800-325-5052 |

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Flammable liquids (Category 3), H226

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



| Signal word | Warning |
|-----------------------------|--|
| Hazard statement(s) H226 | Flammable liquid and vapour. |
| Precautionary statement(s) | |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to |

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| | extinguish. |
|-------------|---|
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances Formula : C7H14O2 Molecular weight : 130.18 g/mol CAS-No. : 624-41-9 EC-No. : 210-843-8 Index-No. : 607-130-00-2

Hazardous components

| Component | Classification | Concentration |
|---|--------------------|---------------|
| 2-Methylbutyl acetate | | |
| | Flam. Liq. 3; H226 | <= 100 % |
| For the full text of the H-Statements mentioned in this Section, see Section 16 | | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

3.1

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If 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

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. 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

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 No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
- **6.2 Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- **6.3** Methods and materials for containment and cleaning up Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- 6.4 Reference to other sections For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

| Component | CAS-No. | Value | Control parameters | Basis |
|-----------------------|----------|-------------|--------------------------|--|
| 2-Methylbutyl acetate | 624-41-9 | TWA | 50.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respi | iratory Tract irritatio | on |
| | | STEL | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respi | iratory Tract irritatio | on |
| | | TWA | 50.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respi | iratory Tract irritatio | on |
| | | STEL | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respi | iratory Tract irritatio | on |
| | | TWA | 50 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respi | iratory Tract irritatio | on |
| | | STEL | 100 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respi | iratory Tract irritation | on |

| STEL | 100 ppm 532 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
|------|----------------------|---|
| PEL | 50 ppm 266 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

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

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).

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.

Body Protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| a) | Appearance | Form: liquid |
|----|--|--|
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | рН | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | 138 °C (280 °F) at 988 hPa (741 mmHg) - lit. |
| g) | Flash point | 35 °C (95 °F) - closed cup |
| 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 | 0.876 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| | | |

| | 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 | | | |
| 10. STABILITY AND REACTIVITY | | | | |
| 10.1 | Reactivity No data available | | | |

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Vapours may form explosive mixture with air.
- **10.4 Conditions to avoid** Heat, flames and sparks.
- **10.5 Incompatible materials** Strong oxidizing agents

Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity No data available

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

Germ cell mutagenicity No data available

Carcinogenicity

- 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.
- 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.

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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.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Additional Information RTECS: EL5466666

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

Results of PBT and vPvB assessment 12.5 PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects 12.6

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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.

14. TRANSPORT INFORMATION

DOT (US)

| Pr | N number: 1104 oper shipping name: eportable Quantity (R | | Packing group: III | | |
|----|--|---------------------------|--------------------|------------------|-----------|
| Po | bison Inhalation Haza | rd: No | | | |
| U | IDG N number: 1104 roper shipping name: | Class: 3 AMYL ACETATES | Packing group: III | EMS-No: F-E, S-D | |
| | TA N number: 1104 /364401 | Class: 3 | Packing group: III | | Page 6 of |

Proper shipping name: Amyl acetates

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

Fire Hazard

Massachusetts Right To Know Components

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

Pennsylvania Right To Know Components

| CAS-No. | Revision Date |
|----------|---------------------|
| 624-41-9 | 1993-02-16 |
| | |
| CAS-No. | Revision Date |
| 624-41-9 | 1993-02-16 |
| | 624-41-9 CAS-No. |

California Prop. 65 Components

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

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16. OTHER INFORMATION

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

| Flam. Liq. H226 | Flammable liquids Flammable liquid and vapour. |
|--|---|
| HMIS Rating Health hazard: Chronic Health Haz Flammability: | 3 |
| Physical Hazard | 0 |
| NFPA Rating | |
| Health hazard: | 0 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

Further information

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Preparation Information

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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