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SAFETY DATA SHEET

Version 5.2 Revision Date 06/29/2016 Print Date 07/13/2017

1. PRODUCT AND COMPANY IDENTIFICATION

| 1.1 | Product identifiers Product name | : | Benzylacetone |
|-----|-------------------------------------|------|---|
| | Product Number Brand | : | B3015 Sigma |
| | CAS-No. | : | 2550-26-7 |
| 1.2 | Relevant identified uses of | i th | 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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Synonyms | : 4-Phenyl-2-butanone |
|------------------|-----------------------|
| Formula | : C10H12O |
| Molecular weight | : 148.21 g/mol |
| CAS-No. | : 2550-26-7 |
| EC-No. | : 219-847-4 |

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

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.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. Sigma - B3015

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

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 No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapours, mist or gas. For personal protection see section 8.

6.2 Environmental precautions Do not let product enter drains.

- 6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections For disposal see section 13.

7. HANDLING AND STORAGE

- **7.1 Precautions for safe handling** 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.
- **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

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

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, 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

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| a) | Appearance | Form: liquid Colour: colourless |
|----|--|---|
| b) | Odour | sweet |
| c) | Odour Threshold | No data available |
| d) | рН | No data available |
| e) | Melting point/freezing point | Melting point/freezing point: -16.9 °C (1.6 °F) at 1,013 hPa (760 mmHg) |
| f) | Initial boiling point and boiling range | 236 - 238 °C (457 - 460 °F) at 1,013 hPa (760 mmHg) |
| g) | Flash point | 105 °C (221 °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 | 0.04 hPa (0.03 mmHg) at 20.1 °C (68.2 °F) 0.06 hPa (0.05 mmHg) at 23.6 °C (74.5 °F) 0.09 hPa (0.07 mmHg) at 29.7 °C (85.5 °F) |
| I) | Vapour density | No data available |
| m) | Relative density | 0.99 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n- octanol/water | log Pow: 2 at 25 °C (77 °F) |
| p) | Auto-ignition | 454 °C (849 °F) at 1,010 - 1,024.0 hPa (758 - 768.1 mmHg) |
| | | |

temperature

| | | temperature | |
|-------|-----|---|---------------------|
| | 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 | | her safety information data available | |
| 10. S | TAB | ILITY AND REACTIVITY | |
| 10.1 | | activity data available | |
| 10.2 | | emical stability able under recommended | storage conditions. |
| 10.3 | - | ssibility of hazardous re data available | eactions |
| 10.4 | | nditions to avoid data available | |

- 10.5 Incompatible materials Strong oxidizing agents
- 10.6 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

LD50 Oral - Rat - male - 3,200 mg/kg (OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rabbit - male and female - > 5,000 mg/kg (OECD Test Guideline 402)

No data available

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitisation

in vivo assay - Mouse Result: Did not cause sensitisation on laboratory animals. (OECD Test Guideline 429)

Germ cell mutagenicity

Micronucleus test Human lymphocytes Result: negative

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.
- 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

Repeated dose
toxicityRat - male and female - Oral - 90 d - NOAEL : 500 mg/kg - OECD Test Guideline
408RTECS: EL9600000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

Toxicity to daphnia and
other aquatic
invertebratesImmobilization EC50 - Daphnia magna (Water flea) - > 95.4 mg/l - 48 h
(OECD Test Guideline 202)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 90 % - Readily biodegradable (OECD Test Guideline 301D)

- **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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

ΙΑΤΑ

Not dangerous goods

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

| | CAS-No. | Revision Date |
|-------------------------------------|-----------|---------------|
| 4-Phenylbutan-2-one | 2550-26-7 | |
| New Jersey Right To Know Components | | |
| | CAS-No. | Revision Date |
| 4-Phenylbutan-2-one | 2550-26-7 | |
| | | |

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.

16. OTHER INFORMATION

| Health hazard: | 1 |
|-------------------------------|--------|
| Chronic Health Hazard: | |
| Flammability: | 1 |
| Physical Hazard | 0 |
| | |
| NFPA Rating | |
| NFPA Rating Health hazard: | 0 |
| - | 0 1 |

Further information

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

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