
1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 2-Chloro-2-methylpropane

Product Number : C56352

Brand : Aldrich

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION**Emergency Overview****OSHA Hazards**

Flammable liquid

GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)
H225 : Highly flammable liquid and vapour.Precautionary statement(s)
P210 : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**HMIS Classification**

Health hazard: 0

Flammability: 3

Physical hazards: 0

NFPA Rating

Health hazard: 0

Fire: 3

Reactivity Hazard: 0

Potential Health Effects**Inhalation** : May be harmful if inhaled. May cause respiratory tract irritation.**Skin** : May be harmful if absorbed through skin. May cause skin irritation.**Eyes** : May cause eye irritation.**Ingestion** : May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTSSynonyms : *tert*-Butyl chlorideFormula : C₄H₉Cl

Molecular Weight : 92.57 g/mol

| CAS-No. | EC-No. | Index-No. | Concentration |
|---------------------------------|-----------|-----------|---------------|
| 2-Chloro-2-methylpropane | | | |
| 507-20-0 | 208-066-4 | - | - |

4. 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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

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

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

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.

Conditions for safe storage

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. Store in cool place.

Refrigerate before opening. hygroscopic Handle and open container with care.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (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).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid

Safety data

| | |
|---|--|
| pH | no data available |
| Melting point | -25 °C (-13 °F) - lit. |
| Boiling point | 51 - 52 °C (124 - 126 °F) - lit. |
| Flash point | -23 °C (-9 °F) - closed cup |
| Ignition temperature | 540 °C (1,004 °F) |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Vapour pressure | 350.1 hPa (262.6 mmHg) at 20 °C (68 °F) |
| Density | 0.851 g/cm ³ at 25 °C (77 °F) |
| Water solubility | no data available |
| Partition coefficient: n-octanol/water | log Pow: 2.4 |
| Relative vapour density | 3.2 - (Air = 1.0) |

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Vapours may form explosive mixture with air.

Conditions to avoid

hygroscopic
Heat, flames and sparks.

Materials to avoid

Strong oxidizing agents, Strong bases

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Carcinogenicity - mouse - Intraperitoneal

Tumorigenic:Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration:Tumors.

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.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure (GHS)

no data available

Specific target organ toxicity - repeated exposure (GHS)

no data available

Aspiration hazard

no data available

Potential health effects

| | |
|-------------------|---|
| Inhalation | May be harmful if inhaled. May cause respiratory tract irritation. |
| Ingestion | May be harmful if swallowed. |
| Skin | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes | May cause eye irritation. |

Signs and Symptoms of Exposure

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

Additional Information

RTECS: TX5040000

12. ECOLOGICAL INFORMATION**Toxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 1127 Class: 3 Packing group: II
Proper shipping name: Chlorobutanes
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG

UN-Number: 1127 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: CHLOROBUTANES
Marine pollutant: No

IATA

UN-Number: 1127 Class: 3 Packing group: II
Proper shipping name: Chlorobutanes

15. REGULATORY INFORMATION

OSHA Hazards

Flammable liquid

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

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

SARA 313 Components

SARA 313: 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

| | | |
|--------------------------|---------------------|-----------------------------|
| 2-Chloro-2-methylpropane | CAS-No. 507-20-0 | Revision Date 1993-04-24 |
|--------------------------|---------------------|-----------------------------|

Pennsylvania Right To Know Components

| | | |
|--------------------------|---------------------|-----------------------------|
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|--------------------------|---------------------|-----------------------------|

New Jersey Right To Know Components

2-Chloro-2-methylpropane

CAS-No.
507-20-0

Revision Date
1993-04-24

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

Further information

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