

ALFAAL00709

(+/-)-2-Phenylpropionic acid

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:
 Product Description: (±)-2-苯基丙酸, 98%
 (+/-)-2-Phenylpropionic acid

Cat No. : L00709
 Synonyms DL-Hydratropic acid
 CAS No 492-37-5
 Molecular Formula C9 H10 O2

Supplier Avocado Research Chemicals Ltd.
 (Part of Thermo Fisher Scientific)
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 Lancashire, LA3 2XY,
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Recommended Use Laboratory chemicals.
 Uses advised against No Information available

SECTION 2. HAZARD IDENTIFICATION

Physical State
 Liquid

Appearance
 Yellow

Odor
 Odorless

Emergency Overview

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Classification of the substance or mixture

| | |
|--|------------|
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity - (single exposure) | Category 3 |

Label Elements



Signal Word

Warning

(+/-)-2-Phenylpropionic acid**Hazard Statements**

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary Statements**Prevention**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P264 - Wash face, hands and any exposed skin thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P362 + P364 - Take off contaminated clothing and wash it before reuse

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Physical and Chemical Hazards

None identified.

Health Hazards

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight % |
|-------------------------------------|----------|----------|
| Benzeneacetic acid, .alpha.-methyl- | 492-37-5 | 98 |

SECTION 4. 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 soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion

Clean mouth with water. Get medical attention.

Most important symptoms and effects

No information available.

Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

(+/-)-2-Phenylpropionic acid**Notes to Physician**

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

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

Protective Equipment and Precautions 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**Personal Precautions**

Ensure adequate ventilation.

Environmental Precautions

See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not let this chemical enter the environment.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE**Handling**

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Storage

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

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control Parameters****Exposure Controls****Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

(+/-)-2-Phenylpropionic acid**Personal protective equipment****Eye Protection** Goggles (European standard - EN 166)**Hand Protection** Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers | - | EN 374 | (minimum requirement) |
| Butyl rubber | recommendations | | | |
| Nitrile rubber | | | | |
| Neoprene | | | | |
| PVC | | | | |

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 compatibility, 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.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure**Respiratory Protection** No protective equipment is needed under normal use conditions.**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**Small scale/Laboratory use** Maintain adequate ventilation**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.**Environmental exposure controls** No information available.**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

| | | |
|--|-------------------------------|--|
| Appearance | Yellow | |
| Physical State | Liquid | |
| Odor | Odorless | |
| Odor Threshold | No data available | |
| pH | 3 | 5 g/L aq. solution |
| Melting Point/Range | 5 °C / 41 °F | |
| Softening Point | No data available | |
| Boiling Point/Range | 260 - 262 °C / 500 - 503.6 °F | @ 760 mmHg |
| Flash Point | > 148 °C / > 298.4 °F | Method - No information available |
| Evaporation Rate | No data available | |
| Flammability (solid,gas) | Not applicable | Liquid |
| Explosion Limits | No data available | |
| Vapor Pressure | No data available | |
| Vapor Density | 5.18 | (Air = 1.0) |
| Specific Gravity / Density | 1.100 | |
| Bulk Density | Not applicable | Liquid |
| Water Solubility | 10 g/L (20°C) | |
| Solubility in other solvents | No information available | |
| Partition Coefficient (n-octanol/water) | | |
| Autoignition Temperature | 465 °C / 869 °F | |
| Decomposition Temperature | No data available | |
| Viscosity | 44 mPa.s at 20 °C | |

(+/-)-2-Phenylpropionic acid

| | |
|-----------------------------|--------------------------|
| Explosive Properties | No information available |
| Oxidizing Properties | No information available |

| | |
|--------------------------|-----------|
| Molecular Formula | C9 H10 O2 |
| Molecular Weight | 150.18 |

SECTION 10. STABILITY AND REACTIVITY

| | |
|------------------|---------------------------------|
| Stability | Stable under normal conditions. |
|------------------|---------------------------------|

| | |
|---------------------------------|---------------------------|
| Hazardous Reactions | No information available. |
| Hazardous Polymerization | No information available. |

| | |
|----------------------------|------------------------|
| Conditions to Avoid | Incompatible products. |
|----------------------------|------------------------|

| | |
|---------------------------|--------------------------|
| Materials to avoid | Strong oxidizing agents. |
|---------------------------|--------------------------|

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11. TOXICOLOGICAL INFORMATION

| | |
|----------------------------|---|
| Product Information | No acute toxicity information is available for this product |
|----------------------------|---|

(a) acute toxicity;

| | |
|---------------------------------------|------------|
| (b) skin corrosion/irritation; | Category 2 |
|---------------------------------------|------------|

| | |
|---|------------|
| (c) serious eye damage/irritation; | Category 2 |
|---|------------|

(d) respiratory or skin sensitization;

| | |
|--------------------|-------------------|
| Respiratory | No data available |
| Skin | 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; | Category 3 |
|----------------------------------|------------|

| | |
|--------------------------------|--------------------|
| Results / Target organs | Respiratory system |
|--------------------------------|--------------------|

| | |
|------------------------------------|-------------------|
| (i) STOT-repeated exposure; | No data available |
|------------------------------------|-------------------|

| | |
|----------------------|---------------------------|
| Target Organs | No information available. |
|----------------------|---------------------------|

| | |
|-------------------------------|-------------------|
| (j) aspiration hazard; | No data available |
|-------------------------------|-------------------|

| | |
|------------------------------|--|
| Other Adverse Effects | The toxicological properties have not been fully investigated. |
|------------------------------|--|

SAFETY DATA SHEET

(+/-)-2-Phenylpropionic acid

Symptoms / effects, both acute and delayed No information available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects Do not empty into drains.

Persistence and Degradability
Persistence Soluble in water, Persistence is unlikely, based on information available.

Bioaccumulative Potential Bioaccumulation is unlikely

Mobility in soil The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility Highly mobile in soils

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors
Persistent Organic Pollutant This product does not contain any known or suspected substance
Ozone Depletion Potential This product does not contain any known or suspected substance

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

Other Information Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

SECTION 14. TRANSPORT INFORMATION

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

SECTION 15. REGULATORY INFORMATION

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component | The Inventory of Hazardous Chemicals (2015) | List of dangerous goods GB 12268 - 2012 | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|-----------|---|---|------|-------|--------|------|-----|-------|------|------|------|------|
| | | | | | | | | | | | | |

SAFETY DATA SHEET**(+/-)-2-Phenylpropionic acid**

| | Edition) | | | | | | | | | | | |
|--|----------|---|---|---|-----------|---|---|---|---|---|---|---|
| Benzeneacetic acid, .alpha.-methyl- | - | - | X | - | 207-752-0 | X | - | X | X | X | - | - |

National Regulations**SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department
Revision Date 22-Apr-2024
Revision Summary New emergency telephone response service provider.

Training Advice

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

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

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, RTECS

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

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End of Safety Data Sheet