SAFETY DATA SHEETS

According to the UN GHS revision 8

Version: 1.0
Creation Date: July 15, 2019
Revision Date: July 15, 2019

1. SECTION 1: Identification

1.1. GHS Product identifier

Product name Diethyl malonate

1.2. Other means of identification

Product number -

Other names diethyl propanedioate; Propanedioic acid, diethyl ester; Diethyl Malonate

1.3. Recommended use of the chemical and restrictions on use

Identified uses Fragrances

Uses advised against no data available

1.4. Supplier's details

Company Shandong Sincere Chemical Co., Ltd.

Address No.21 Industrial North Road, Licheng District, Jinan City,Shandong Province, China.

Telephone (+86) 188-6575-9396.

1.5. Emergency phone number

Emergency phone number (+86) 188-6575-9396.

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

2. SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Eye irritation, Category 2

2.2. GHS label elements, including precautionary statements

Pictogram(s)

Signal word Danger

Hazard statement(s) H319 Causes serious eye irritation

Precautionary statement(s)

Prevention P264 Wash ... thoroughly after handling.P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

Response P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Storage none

Disposal none

2.3. Other hazards which do not result in classification

no data available

3. SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Diethyl malonate	Diethyl malonate	105-53-3	203-305-9	99.5%

4. SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

If inhaled

Fresh air, rest. Seek medical attention if you feel unwell.

Following skin contact

Rinse and then wash skin with water and soap.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Following ingestion

Give one or two glasses of water to drink. Seek medical attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

no data available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use carbon dioxide, dry powder, water spray, foam.

5.2. Specific hazards arising from the chemical

Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Heating will cause rise in pressure with risk of bursting.

5.3. Special protective actions for fire-fighters

Use carbon dioxide, dry powder, water spray, foam. In case of fire: keep drums, etc., cool by spraying with water.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.2. Environmental precautions

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.3. Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

NO open flames.
Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2. Conditions for safe storage, including any incompatibilities

Separated from strong oxidants. Ventilation along the floor. Store in an area without drain or sewer access.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values
no data available
Biological limit values
no data available

8.2. Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Wear safety goggles.
Skin protection
Protective gloves.
Respiratory protection
Use ventilation.
Thermal hazards
no data available

9. SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Liquid
Colour	no data available
Odour	no data available
Melting point/freezing point	-50°C(lit.)
Boiling point or initial boiling point and boiling range	199°C
Flammability	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.
Lower and upper explosion limit/flammability limit	no data available
Flash point	93°C(lit.)
Auto-ignition temperature	435°C
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	23.2 mg/mL at 37 °C
Partition coefficient n-octanol/water	0.96
Vapour pressure	1 mm Hg (40 °C)
Density and/or relative density	1.055
Relative vapour density	5.52 (vs air)
Particle characteristics	no data available

10. SECTION 10: Stability and reactivity

10.1. Reactivity
It reacts with strong oxidants. This generates fire and explosion hazard.

10.2. Chemical stability
no data available

10.3. Possibility of hazardous reactions
It reacts with strong oxidants. This generates fire and explosion hazard.
10.4. Conditions to avoid
no data available
10.5. Incompatible materials
no data available
10.6. Hazardous decomposition products
no data available

11. SECTION 11: Toxicological information

Acute toxicity
- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation
no data available
Serious eye damage/irritation
no data available
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
no data available
Reproductive toxicity
no data available
STOT-single exposure
The substance is mildly irritating to the eyes.
STOT-repeated exposure
Health effects of the substance have been investigated but none have been found
Aspiration hazard
Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly when dispersed.

12. SECTION 12: Ecological information

12.1. Toxicity
- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: 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. Other adverse effects

no data available

13. SECTION 13: Disposal considerations

13.1. Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. SECTION 14: Transport information

14.1. UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)

14.2. UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)

14.3. Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)

14.4. Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)

14.5. Environmental hazards

ADR/RID: No	IMDG: No	IATA: No

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to IMO instruments

no data available

15. SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Diethyl malonate	Diethyl malonate	105-53-3	203-305-9

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

16. SECTION 16: Other information

Information on revision

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Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

- IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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