Material Safety Data Sheet
Isosorbide dimethyl ether

Section 1 - Chemical Product and Company Identification

Product Name: Isosorbide dimethyl ether

Other Name: DMI
CAS NO.: 5306-85-4
Manufacturer/Supplier:
Tianjin Realet Chemical Technology Co.,Ltd.
Tel: +86 (0)22 5878 8819
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E-Mail:realetchem@vip.163.com
Http://www.realetchem.com

Section 2 - Composition, Information on Ingredients

Substance / Mixture : Substance
Substances
Synonyms *:* Dimethyl isosorbide
DMI
Formula : C8H14O4
Molecular weight : 174.19 g/mol

CAS#	Chemical Name	Percent	EINECS/ELINCS
5306-85-4	Isosorbide dimethyl ether	99%	226-159-8

Section 3 - Hazards Identification

Summary of emergency
clear, liquid colorless After inhalation: fresh air. In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. After eye contact: rinse out with plenty of water., Remove contact lenses. After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell. Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire. no information available

GHS Classification

Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements
Not a hazardous substance or mixture.

Physical and chemical hazards
Referring to current information, no physical or chemical hazard.

Health hazards
Referring to current information, no health hazard.

Environmental hazards
Referring to current information, no environmental hazard.

Other hazards - none

Section 4 - First Aid Measures

Description of first-aid measures
If inhaled
After inhalation: fresh air.
In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact
After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

Indication of any immediate medical attention and special treatment needed
No data available

Notes to physician
No data available

Section 5 - Fire Fighting Measures

Extinguishing media
Suitable extinguishing media
Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

Precautions for safe handling

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Storage class

Storage class (TRGS 510): 10: Combustible liquids

Section 8 - Exposure Controls, Personal Protection

Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

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). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other Substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Viton®

Minimum layer thickness: 0.7 mm

Break through time: 30 min

Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Respiratory protection

Not required; excep

Control of environmental exposure

Do not let product enter drains.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	Form: clear, liquid Color: colorless
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting OECD point/freezing point	Melting point/freezing point: -84 °C at ca.1,013 hPa - Test Guideline 102
f) Initial boiling point and boiling range	93 - 95 °C at 0.1 hPa - lit.
g) Flash point	116 °C at ca.1,013 hPa - closed cup - ISO 2719
h) Evaporation rate	No data available
i) Flammability (solid,	No data available

gas)	
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Density	1.15 g/mL at 25 °C - lit.
Relative density	1.166 at 20 °C - OECD Test Guideline 109
n) Water solubility	2,000 g/l at 20 °C - OECD Test Guideline 105- soluble
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	285 °C at 1,003 hPa
q) Decomposition temperature	No data available
r) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

Other safety information
No data available

Section 10 Stability and Reactivity

Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions
no information available

Conditions to avoid
Strong heating.

Incompatible materials
No data available

Hazardous decomposition products
In the event of fire: see section 5

Section 11 - Toxicological Information

Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 5,630 mg/kg

(OECD Test Guideline 401)
Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit
Result: No skin irritation - 24 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation

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

Respiratory or skin sensitisation

Local lymph node assay (LLNA) - Mouse
Result: negative
(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test
Test system: S. typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Carcinogenicity

No data available

Reproductive toxicity

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 toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - 375 mg/kg
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

Toxicity

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72h
(OECD Test Guideline 201)
Toxicity to bacteria static test EC50 - Pseudomonas putida - > 100 mg/l - 6 h
Remarks: (ECHA)

Persistence and degradability
Biodegradability aerobic - Exposure time 28 d
Result: < 1 % - Not readily biodegradable.
(Directive 67/548/EEC Annex V, C.4.D.)

Bioaccumulative potential
no data available

Mobility in soil
no data available

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

Endocrine disrupting properties
No data available

Other adverse effects
No data available

Section 13 - Disposal Considerations

Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14 - Transport Information

UN number
ADR/RID: - IMDG: - IATA-DGR: -
UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA-DGR: Not dangerous goods
Transport hazard class(es)
ADR/RID: - IMDG: - IATA-DGR: -
Packaging group
ADR/RID: - IMDG: - IATA-DGR: -
Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA-DGR: no

Special precautions for user

Incompatible materials

Further information

Not classified as dangerous in the meaning of transport regulations.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Other regulations

Please pay attention on the waste treatment should also comply with local regulations requirement.

Section 16 - Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.