Prepared according to GB/T 16483, GB/T 17519

# Diethyl carbonate (DEC)

800010060181 Initial release date: 2023.09.21

Revision Date 2024.04.05 Print Date 2024.04.13 Version 2.1

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name Diethyl carbonate (DEC)

CAS-No. : 105-58-8

### Manufacturer or supplier's details

Supplier

SHELL EASTERN CHEMICALS (S)

A REGISTERED BUSINESS OF SHELL EASTERN

TRADING (PTE) LTD (UEN:198902087C)

9 North Buona Vista Drive, #07-01

The Metropolis Tower 1 Singapore 138588

Singapore

Telephone

Telefax

Contact for Safety Data Sheet

Emergency telephone

number

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

Appearance	liquid	
Colour	colourless	
Odour	slight	

#### **GHS Classification**

Flammable liquids : Category 3

### **GHS** label elements

Hazard pictograms

Signal word

Hazard statements PHYSICAL HAZARDS:

H226 Flammable liquid and vapour.

**HEALTH HAZARDS:** 

Not classified as a health hazard under GHS criteria.

**ENVIRONMENTAL HAZARDS:** 

Not classified as an environmental hazard under GHS criteria.

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Precautionary statements

#### Prevention:

P102 Keep out of reach of children.

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.

No smokina.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

### Disposal:

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

#### **Additional Information:**

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

#### Other hazards which do not result in classification

Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire.

Health Hazards	Inhalation: Slightly irritating to respiratory system.	
	Skin: Eyes: Ingestion: May be harmful if swallowed.	

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

#### **Hazardous components**

Chemical name	CAS-No.	Classification	Concentration (% w/w)
diethyl carbonate	105-58-8	Flam. Liq.3; H226	100

For explanation of abbreviations see section 16.

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4. FIRST-AID MEASURES

General advice : Not expected to be a health hazard at ambient temperature.

If inhaled : If inhalation of mists, fumes or vapour causes irritation to the

nose or throat, remove to fresh air.

If rapid recovery does not occur, obtain medical attention.

In case of skin contact : Remove contaminated clothing. Flush exposed area with

water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

: Flush eye with copious quantities of water. In case of eye contact

If persistent irritation occurs, obtain medical attention.

If swallowed : No treatment necessary under normal conditions of use.

In the unlikely event of ingestion, obtain medical attention

immediately.

: Data not available

Do NOT induce vomiting.

Most important symptoms and effects, both acute and

Protection of first-aiders

delayed

: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the

incident, injury and surroundings.

Notes to physician : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam, water spray or fog. Dry chemical

powder, carbon dioxide, sand or earth may be used for small

fires only.

Unsuitable extinguishing

media

Do not use water in a jet.

Simultaneous use of foam and water on the same surface is

to be avoided as water destroys the foam.

Specific hazards during

firefighting

: Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and

gases (smoke).

Carbon monoxide may be evolved if incomplete combustion

occurs.

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment. If possible remove containers from the danger zone.

If the fire cannot be extinguished the only course of action is

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to evacuate immediately.

Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways.

Special protective equipment for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Do not breathe fumes, vapour. Do not operate electrical equipment.

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area and evacuate all personnel. Attempt to disperse the gas or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas meter.

Vapour can travel for considerable distances both above and below the ground surface. Underground services (drains, pipelines, cable ducts) can provide preferential flow paths.

Environmental precautions

: Take measures to minimise the effects on groundwater. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Methods and materials for containment and cleaning up

: For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove

contaminated soil and dispose of safely.

Take precautionary measures against static discharges.

Avoid contact with skin, eyes and clothing.

Evacuate the area of all non-essential personnel.

Ventilate contaminated area thoroughly.

Ensure electrical continuity by bonding and grounding (earthing) all equipment.

If contamination of sites occurs remediation may require specialist advice.

Additional advice : For guidance on selection of personal protective equipment

see Section 8 of this Safety Data Sheet.

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Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

For guidance on disposal of spilled material see Section 13 of

this Safety Data Sheet.

Vapour may form an explosive mixture with air.

Local authorities should be advised if significant spillages

cannot be contained.

Observe all relevant local and international regulations.

#### 7. HANDLING AND STORAGE

### Handling

General Precautions : Avoid breathing of or direct contact with material. Only use in

well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine

appropriate controls for safe handling, storage and disposal of

this material.

Air-dry contaminated clothing in a well-ventilated area before

laundering.

Prevent spillages.

Turn off all battery operated portable electronic devices (examples include: cellular phones, pagers and CD players)

before operating gasoline pump.

Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse.

Ensure that all local regulations regarding handling and storage facilities are followed.

General Precautions Vehicle fueling and vehicle workshop areas - Avoid inhalation

of vapours and contact with skin, when filling or emptying a

vehicle.

Advice on safe handling : Ensure that all local regulations regarding handling and

storage facilities are followed. When using do not eat or drink.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks. Never siphon by mouth.

Avoid exposure.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Properly dispose of any contaminated rags or cleaning

materials in order to prevent fires. Do not breathe vapours or spray mist.

Handle and open container with care in a well-ventilated area.

Avoidance of contact : Strong oxidizing agents

rubber, various plastics

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**Product Transfer** 

Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Storage

Other data : Drum and small container storage:

Keep containers closed when not in use.

Drums should be stacked to a maximum of 3 high.

Packaged product must be kept tightly closed and stored in a diked (bunded) well-ventilated area, away from, ignition

sources and other sources of heat.

Use properly labeled and closable containers.

Take suitable precautions when opening sealed containers, as

pressure can build up during storage.

Bulk storage tanks should be diked (bunded).

Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of

strict procedures and precautions.

Packaging material : Suitable material: For containers, or container linings use mild

steel, stainless steel., For container paints, use epoxy paint,

zinc silicate paint.

Unsuitable material: PVC., Natural rubber.

Container Advice : Do not cut, drill, grind, weld or perform similar operations on or

near containers. Containers, even those that have been

emptied, can contain explosive vapours.

Specific use(s) : Not applicable.

#### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Components with workplace control parameters

# **Biological occupational exposure limits**

No biological limit allocated.

### **Monitoring Methods**

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

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Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

GBZ 159 Specifications of air sampling for hazardous substances monitoring in the workplace.

GBZ/T 160 Determination of toxic substances in the air of workplace.

GBZ/T 192 Determination of dust in the air of workplace.

GBZ/T 300 Determination of toxic substances in the air of workplace

### **Engineering measures**

: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Use sealed systems as far as possible.

Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

Local exhaust ventilation is recommended.

Firewater monitors and deluge systems are recommended.

Eye washes and showers for emergency use.

#### General Information:

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating. drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or for subsequent recycle.

Do not ingest. If swallowed, then seek immediate medical assistance

#### Personal protective equipment

#### Protective measures

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection : No respiratory protection is ordinarily required under normal

conditions of use.

In accordance with good industrial hygiene practices. precautions should be taken to avoid breathing of material.

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Hand protection

Remarks : Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374. US: F739) made from the following materials may provide suitable chemical protection. PVC. Longer term protection:

Nitrile rubber. Incidental contact/Splash protection: Neoprene rubber. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove

suppliers. Contaminated gloves should be replaced.

Eye protection : Eve protection is not required under normal conditions of use.

If material is handled such that it could be splashed into eyes,

protective eyewear is recommended.

Skin and body protection : Skin protection is not ordinarily required beyond standard

work clothes.

### **Environmental exposure controls**

General advice : Local guidelines on emission limits for volatile substances

must be observed for the discharge of exhaust air containing

vapour.

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local

environmental legislation.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless Odour slight

Odour Threshold : Data not available Melting point/freezing point : -43 °C / -45 °F

Initial boiling point and boiling : 126 °C / 259 °F

range

Flash point : 25 °C / 77 °F

Evaporation rate : Data not available

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Upper explosion limit : 11 %(V)

Lower explosion limit : 1.4 %(V)

Vapour pressure : 1,440 Pa

Relative vapour density : Data not available
Relative density : Data not available

Density : 975 kg/m3

Solubility(ies)

Water solubility : 18.8 g/l

Solubility in other solvents : Data not available

Partition coefficient: n-

octanol/water

: Pow: 1.21

Auto-ignition temperature : 445 °C / 833 °F

Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : 0.837 mPa.s

Viscosity, kinematic : Data not available

Particle size : Data not available

#### 10. STABILITY AND REACTIVITY

Reactivity : Stable under normal conditions of use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: Reacts with air to form peroxides.

Vapours may form explosive mixture with air.

Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.

In certain circumstances product can ignite due to static

electricity.

Incompatible materials : Strong oxidizing agents

rubber, various plastics

Hazardous decomposition

products

: Hazardous decomposition products are not expected to form

during normal storage.

Thermal decomposition is highly dependent on conditions. A

complex mixture of airborne solids, liquids and gases

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including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative

degradation.

#### 11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on product data, a knowledge of

the components and the toxicology of similar products.

Exposure routes : Inhalation is the primary route of exposure although

absorption may occur through skin contact or following

accidental ingestion.

**Acute toxicity** 

**Product:** 

Acute oral toxicity

Remarks: Low toxicity

LD50 > 5000 mg/kg

Acute inhalation toxicity : Remarks: Low toxicity if inhaled.

Based on available data, the classification criteria are not met.

Acute dermal toxicity

Remarks: LD50 > 5000 mg/kg

Low toxicity

Based on available data, the classification criteria are not met.

Acute toxicity (other routes of

administration)

Remarks: Not a respiratory irritant

Components:

diethyl carbonate:

Acute oral toxicity

Assessment: The substance or mixture has no acute oral

toxicity

Remarks: Based on available data, the classification criteria

are not met.

Acute inhalation toxicity : Assessment: The substance or mixture has no acute

inhalation toxicity

Remarks: Based on available data, the classification criteria

are not met.

Acute dermal toxicity : Rat, male: 4,876 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on available data, the classification criteria

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are not met.

#### Skin corrosion/irritation

#### **Product:**

Remarks: Not irritating to skin.

#### **Components:**

# diethyl carbonate:

Species: Rabbit

Result: No skin irritation

Remarks: Based on available data, the classification criteria are not met.

# Serious eye damage/eye irritation

#### **Product:**

Remarks: Not irritating to eye.

#### **Components:**

# diethyl carbonate:

Species: Rabbit

Result: No eye irritation

Remarks: Based on available data, the classification criteria are not met.

# Respiratory or skin sensitisation

#### **Product:**

Remarks: Not a sensitiser.

Based on available data, the classification criteria are not met.

# **Components:**

#### diethyl carbonate:

Test Method: Popliteal lymph node assay (PLNA)

Species: Mouse

Result: Does not cause skin sensitisation.

Remarks: Based on available data, the classification criteria are not met.

# Germ cell mutagenicity

#### **Product:**

: Remarks: Non mutagenic

# **Components:**

### diethyl carbonate:

Genotoxicity in vitro : Remarks: Based on available data, the classification criteria

are not met.

: Remarks: Based on available data, the classification criteria

are not met.

Germ cell mutagenicity- : This product does not meet the criteria for classification in

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Assessment categories 1A/1B.

#### Carcinogenicity

#### **Product:**

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

#### **Components:**

# diethyl carbonate:

Remarks: Based on available data, the classification criteria are not met.

Carcinogenicity - Assessment

: This product does not meet the criteria for classification in

categories 1A/1B.

Material	GHS/CLP Carcinogenicity Classification
diethyl carbonate	No carcinogenicity classification.

### Reproductive toxicity

**Product:** 

:

Remarks: Not a developmental toxicant., Based on available data, the classification criteria are not met., Does not impair

fertility.

#### Components:

diethyl carbonate:

: Remarks: Based on available data, the classification criteria

are not met.

Effects on foetal development

: Remarks: Based on available data, the classification criteria

are not met.

Reproductive toxicity -

Assessment

: This product does not meet the criteria for classification in

categories 1A/1B.

# STOT - single exposure

#### **Product:**

Remarks: Based on available data, the classification criteria are not met.

#### **Components:**

#### diethyl carbonate:

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Remarks: Based on available data, the classification criteria are not met.

### STOT - repeated exposure

#### **Product:**

Remarks: Based on available data, the classification criteria are not met.

#### **Components:**

#### diethyl carbonate:

Remarks: Based on available data, the classification criteria are not met.

#### **Aspiration toxicity**

#### **Product:**

Not an aspiration hazard.

# **Components:**

#### diethyl carbonate:

Based on available data, the classification criteria are not met.

#### **Further information**

#### **Product:**

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

# **Components:**

# diethyl carbonate:

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

# 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically

for this product.

Information given is based on a knowledge of the components

and the ecotoxicology of similar products.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for

individual component(s).

#### **Ecotoxicity**

# Product:

Toxicity to fish (Acute

Oxicity to list (Acute .

toxicity) Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to crustacean (Acute

toxicity) Remarks: Practically non toxic:

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LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic

plants (Acute toxicity)

Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic

toxicity)

: Remarks: NOEC/NOEL > 100 mg/l

Toxicity to crustacean

(Chronic toxicity)

: Remarks: NOEC/NOEL > 100 mg/l

Toxicity to microorganisms

(Acute toxicity)

: Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Components: diethyl carbonate:

Toxicity to fish (Acute

toxicity)

: LC50 : >= 65 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to crustacean (Acute

toxicity)

: NOEC: 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

EC50 : >= 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to algae/aquatic

plants (Acute toxicity)

: Remarks: Based on available data, the classification criteria

are not met.

Toxicity to microorganisms

(Acute toxicity)

: NOEC (Bacteria): 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to fish (Chronic

toxicity)

: Remarks: Based on available data, the classification criteria

are not met.

Toxicity to

crustacean(Chronic toxicity)

: Remarks: Based on available data, the classification criteria

are not met.

Persistence and degradability

**Product:** 

Biodegradability : Remarks: Readily biodegradable., Oxidises rapidly by photo-

chemical reactions in air and water.

**Components:** diethyl carbonate:

: Method: Regulation (EC) No. 440/2008, Annex, C.4-D Biodegradability

Remarks: Readily biodegradable.

Bioaccumulative potential

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**Product:** 

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

Partition coefficient: n-

octanol/water
Components:
diethyl carbonate:

Bioaccumulation

: Pow: 1.21

: Remarks: Due to the distribution coefficient n-octanol/water,

accumulation in organisms is not expected.

Based on available data, the classification criteria are not met.

Mobility in soil

Product:

Mobility : Remarks: If the product enters soil, one or more constituents

will or may be mobile and may contaminate groundwater.,

After release, disperses through ground water.

Components:

diethyl carbonate:

Stability in soil : Remarks: no data available

Other adverse effects

**Product:** 

Additional ecological

information

: Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential.

<u>Components:</u> diethyl carbonate:

Results of PBT and vPvB

assessment

: Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very

bioaccumulative (vPvB).

#### 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be

established beforehand.

Do not dispose into the environment, in drains or in water

ourses.

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater

contamination.

MARPOL - see International Convention for the Prevention of

Pollution from Ships (MARPOL 73/78) which provides

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technical aspects at controlling pollutions from ships.

Contaminated packaging : Drain container thoroughly.

After draining, vent in a safe place away from sparks and fire.

Residues may cause an explosion hazard. Do not puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

Do not pollute the soil, water or environment with the waste

container.

Local legislation

Remarks : Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or

national requirements and must be complied with.

#### 14. TRANSPORT INFORMATION

### **National Regulations**

# **International Regulations**

**ADR** 

UN number : 2366

Proper shipping name : DIETHYL CARBONATE

Class : 3
Packing group : III
Labels : 3
Hazard Identification Number : 30
Environmentally hazardous : no

IATA-DGR

UN/ID No. : UN 2366

Proper shipping name : Diethyl carbonate

Class : 3
Packing group : III
Labels : 3

IMDG-Code

UN number : UN 2366

Proper shipping name : DIETHYL CARBONATE

Class : 3
Packing group : III
Labels : 3
Marine pollutant : no

### Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

#### Special precautions for user

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Not applicable

# 15. REGULATORY INFORMATION

#### National regulatory information

Law on the Prevention and Control of Occupational Diseases

# **Regulations on Safety Management of Hazardous Chemicals**

Catalogue of Hazardous Chemicals : Listed

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218)

Category Threshold quantity

Flammable liquids 5,000 t

Hazardous Chemicals for Priority Management under : Not applicable

SAWS

#### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not applicable

# Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

Catalogue of Toxic Chemicals Severely Restricted in : Not applicable

China

#### Other international regulations

#### The components of this product are reported in the following inventories:

AIIC : Listed DSL Listed **IECSC** : Listed **ENCS** Listed KECI : Listed : Listed NZIoC **PICCS** : Listed TSCA : Listed TCSI : Listed

#### **16. OTHER INFORMATION**

#### **Full text of H-Statements**

H226 Flammable liquid and vapour.

Full text of other abbreviations

Flam. Liq. Flammable liquids

#### **Abbreviations and Acronyms**

Prepared according to GB/T 16483, GB/T 17519

# Diethyl carbonate (DEC)

800010060181

Initial release date: 2023.09.21

Version 2.1 Revision Date 2024.04.05 Print Date 2024.04.13

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada): ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC -New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration. Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG -Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

#### **Further information**

Training advice : Provide adequate information, instruction and training for

operators.

Other information : A vertical bar (|) in the left margin indicates an amendment

from the previous version.

Sources of key data used to compile the Safety Data

Sheet

: The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

#### 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.

Prepared according to GB/T 16483, GB/T 17519

# **Diethyl carbonate (DEC)**

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