



Safety Data Sheet

According to Regulation (EC) 1907/2006



A454 Di-tert-Butyl Dicarbonate

Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

Di-tert-Butyl Dicarbonate

1.2 Synonym:

DIBOC, Di-tert-Butyl Pyrocarbonate

1.3 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.4 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

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Emergencies:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Flam. Liq. 3

Acute Tox. 2

Eye Irrit. 2

Skin Irrit. 2

Skin Sens. 1

Hazard Pictograms



Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.

H330 Fatal if inhaled.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Classification (67/548/CEE or 1999/45/CE).

R43

T+ Very R36/38

toxic R26

R10

For the full text of the R-phrases mentioned in this section, see section 16.

Component Composition/Information

Name: Di-tert-Butyl Dicarbonate

Formula: C₁₀H₁₈O₅ M.= 218,24 CAS [24424-99-5]

EC number (EINECS): 246-240-1

First aid

4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air. In the event of suffocation, proceed immediately to provide artificial respiration. Seek immediate medical assistance.

4.3 Contact with the skin:

Wash with plenty of soap and water. Remove contaminated clothing. In the event of irritation, seek medical assistance.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek medical assistance.

4.5 Swallowing:

Drink large amounts of water. Drink large amounts of water. Induce vomiting. Induce vomiting. Seek medical assistance. Seek medical assistance.

Fire-fighting means

5.1 Suitable fire-extinguishing means:

Carbon dioxide (CO₂). Foam. Dry powder.

5.2 Fire-fighting means which must NOT be used:

5.3 Special risks:

Combustible. Keep away from sources of ignition. In the event of fire, toxic fumes may form. May form explosive mixtures with the air. Cool the recipients with water. Do not allow extinguishing water into surface or underground water courses.

5.4 Protective equipment:

Suitable clothing and footwear. Self-contained breathing equipment.

Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation. Do not inhale the fumes.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

Handling and storage

7.1 Handling:

Ensure good ventilation and renewal of the air in the premises. Avoid the formation of electrostatic charges. Handle under an extractor fan.

7.2 Storage:

15 °C Cooled (below) Well sealed containers. In a cool, dry, well ventilated place. Away from sources of ignition and heat. Restricted access, only authorized to technicians.

Staff exposure/protection controls

8.1 Technical protective measures:

Ensure good ventilation and renewal of the air in the premises.

8.2 Exposure limit control:**8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Wash hands and face before breaks and when the job is done. Use suitable work clothing. Do not eat, drink or smoke in the workplace. Do not inhale the substance.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

Physical and chemical properties

Appearance: liquid

Colour: Colourless
Granulometry:
Odour: Characteristic.
pH:
Melting point/freezing point: 20 - 24 °C
Initial boiling point and boiling range: 56 - 57 °C
Flash point: 37 °C
Flammability (solid, gas):
Upper/lower flammability or explosive limits:
Vapour pressure:
Vapour density:
Relative density: (20/4) 1,02
Solubility: Insoluble in water
Partition coefficient: n-octanol/water:
Auto-ignition temperature:
Decomposition temperature:
Viscosity:

Stability and reactivity

10.1 Conditions which should be avoided:

High temperatures. Humidity. Direct sunlight.

10.2 Matter which should be avoided:

Strong oxidant agents. Bases. Reducing agents. Acids.

10.3 Hazardous decomposition products:

Carbon monoxide. Carbon dioxide.

10.4 Complementary information:

Moisture sensitive. Heat sensitive.

Toxicological information

- **Acute toxicity:**

LC50 inh rat : 0,1 mg/l 4h

- **Dangerous effects for health:**

Upon contact with the skin: irritations Risk of sensitization Risk of cutaneous absorption. Through contact with the eyes: irritations If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products. If inhaled: Irritations to the mucosae coughing breathing difficulties

Environmental information

12.1 Mobility:

12.2 Ecotoxicity:

12.1.1 - EC50 test (mg/l):

12.2.2 - Receptor medium:

Risk for the water environment

Risk for the land environment

12.2.3 - Observations:

Ecotoxic data not available.

12.3 Degradability:

12.3.1 - Test:

12.3.2 - Biotic degradation classification:

BOD5/COD

Biodegradability

12.3.3 - Abiotic degradation depending on pH:

12.3.4 - Observations:

Data not available.

12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk

12.4.3 - Observations:

Data not available.

12.5 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

Do not allow it to enter the sewage system.

Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Information concerning transport

Overland (ADR):

Technical name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

UN 2929 Class: 6.1 3 Packaging group: I (C/D)

By sea (IMDG):

Technical name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

UN 2929 Class: 6.1 3 Packaging group: I

By air (ICAO-IATA):

Technical name: Toxic liquid, flammable, organic, n.o.s.

UN 2929 Class: 6.1 3 Packaging group: I

Packaging instructions: CAO 604 PAX 603

Regulatory information

Other information

Other precautionary statements

P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash...thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P320 Specific treatment is urgent (see on this label).
P321 Specific treatment (see on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use for extinction.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Labelling (65/548/CEE or 1999/45/CE)

R-phrases(s):	R43 May cause sensitisation by skin contact. R36/38 Irritating to eyes and skin. R26 Very toxic by inhalation. R10 Flammable.
S-phrases(s):	S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S36/37 Wear suitable protective clothing and gloves. S28c After contact with skin, wash immediately with plenty of water and soap and, if it is possible wash also with polyethylene glycol 40

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

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