



Safety Data Sheet

According to Regulation (EC) 1907/2006



C357 1,1,3,3-Tetramethylurea

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

1.1 Identification of the substance or preparation

Name:

1,1,3,3-Tetramethylurea

1.2 Synonym:

TMU

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

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: product.safety@panreac.com

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.

Repr. 1A

Acute Tox. 4

Hazard Pictograms



Signal word

Danger

Hazard statements

H360 May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H302 Harmful if swallowed.

Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash...thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P281 Use personal protective equipment as required.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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

T Toxic
R22
R61

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

Component Composition/Information

Name: 1,1,3,3-Tetramethylurea

Formula: $[(CH_3)_2N]_2CO$ M.= 116,16 CAS [632-22-4]

EC number (EINECS): 211-173-9

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 water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

4.4 Eyes:

Wash with plenty of water, keeping eyelids open. Seek immediate medical assistance.

4.5 Swallowing:

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

Fire-fighting means

5.1 Suitable fire-extinguishing means:

Water. 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.

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:

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

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:

No special indications.

7.2 Storage:

Well sealed containers. In well ventilated premises. Restricted access, only authorized to technicians. Atmospheric temperature.

Staff exposure/protection controls

8.1 Technical protective measures:

Avoid exposure during handling and transfer.

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.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry:

Odour: Odourless.

pH:

Melting point/freezing point: -1 °C

Initial boiling point and boiling range: 176 °C

Flash point: 75 °C

Flammability (solid, gas):

Upper/lower flammability or explosive limits:

Vapour pressure: 13,3 hPa (61 °C)

Vapour density:

Relative density: (20/4) 0,969

Solubility: Miscible with water and with the most organic solvents

Partition coefficient: n-octanol/water:

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Stability and reactivity

10.1 Conditions which should be avoided:

Humidity.

10.2 Matter which should be avoided:

Strong oxidant agents.

10.3 Hazardous decomposition products:

10.4 Complementary information:

Hygroscopic.

Toxicological information

- **Acute toxicity:**

LD50 oral rat : 794 mg/kg

LD50 skn rbt : 3.160 mg/kg

- **Dangerous effects for health:**

Pregnant women must not be allowed to come into contact with the product. Possible risk of adverse effects to the foetus during pregnancy. Possible risk of impaired fertility. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products. If swallowed: dizziness drowsiness

Environmental information

12.1 Mobility:

Repartition: log P(oct)= 0,19

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:

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:

12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk = ----

12.4.3 - Observations:

Product with a low bioaccumulative potential.

12.5 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

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):

By sea (IMDG):

By air (ICAI-IATA):

Regulatory information

Other information

Other precautionary statements

P308+P313 IF exposed or concerned: Get medical advice/attention.

P330 Rinse mouth.

P405 Store locked up.

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

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

R-phrases(s):	R22 Harmful if swallowed. R61 May cause harm to the unborn child.
S-phrases(s):	S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S37 Wear suitable gloves. S24/25 Avoid contact with skin and eyes. S53 Avoid exposure - obtain special instructions before use.

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

Date published: 3.11.10

Review number and date: 3 3.11.10