1430 **4-Methyl-2-Pentanone**

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

1.1 Identification of the substance or preparation

Name:
4-Methyl-2-Pentanone

Synonym:
Isobutylmethylketone, iso-Butylmethylketone, Isopropylacetone, iso-Propylacetone, Methyl Isobutylketone, Methyl iso-Butylketone, MIBK

REACH Registration Number: 01-2119473980-30-XXXX

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 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

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)
Tel.: (+34) 937 489 499

2. Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) nº 1272/2008.

Flam. Liq. 2
Acute Tox. 4
Eye Irrit. 2
STOT SE 3

Hazard Pictograms

Signal word
Danger

Hazard statements
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
EUH066 Repeated exposure may cause skin dryness or cracking.

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).

Xn Harmful	R66
F Highly flammable	R36/37
	R20
	R11

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

3. Component Composition/Information

Name: 4-Methyl-2-Pentanone
Formula: C6H12O M.= 100,16 CAS [108-10-1]
EC number (EINECS): 203-550-1
EC index number: 606-004-00-4
REACH Registration Number: 01-2119473980-30-XXXX

4. 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 to provide artificial respiration.

4.3 Contact with the skin:
Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes:
Wash with plenty of water, keeping eyelids open. In the event of irritation, seek medical assistance.

4.5 Swallowing:
Drink large amounts of water. Laxatives: sodium sulphate (1 soup-spoonful in 250 ml of water). Seek medical assistance.

5. Fire-fighting means

5.1 Suitable fire-extinguishing means:
Foam. Dry powder. Carbon dioxide (CO2).

5.2 Fire-fighting means which must NOT be used:
No specific data.

5.3 Special risks:
Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Risk of inflammation due to accumulation of electrostatic charges.

5.4 Protective equipment:
Suitable clothing and footwear.

6. Measures to be taken in the event of accidental spillage

6.1 Individual precautions:
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.

7. Handling and storage

7.1 Handling:
No special indications.

7.2 Storage:
Well sealed containers.In well ventilated premises.Away from sources of ignition and heat.Room temperature.

8. 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:
VLA-EC: 50 ppm - 208 mg/m3
VLA-ED: 20 ppm - 83 mg/m3

8.3 Respiratory protection:
In the event of fumes forming/aerosols, use suitable respiratory protection. Filter A. Filter P.

8.4 Hand protection:
Use suitable gloves latex neopren

8.5 Eye protection:
Use suitable goggles.

8.6 Individual hygiene measures:
Remove contaminated clothing. Wash hands before breaks and when the job is done.

8.7 Environmental exposure controls:
Fulfill the commitments under local environmental protection legislation.

9. Physical and chemical properties

Appearance: liquid
Colour: Colourless
Granulometry: N/A
Odour: Characteristic.
pH:
N/A
Melting point/freezing point: -80 °C
Initial boiling point and boiling range: 118 °C
Flash point: 13 °C
Flammability (solid, gas):
N/A
Upper/lower flammability or explosive limits: 8 %(V) / 1,2 %(V)
Vapour pressure: 20 hPa (20 °C)
Vapour density: N/A
Relative density: (20/4) 0,801
Solubility: 19 g/l in water20 °C
Partition coefficient: n-octanol/water:
N/A
Auto-ignition temperature: 460 °C
Decomposition temperature: N/A
Viscosity: N/A

10. Stability and reactivity

10.1 Conditions which should be avoided:
The product is chemically stable under standar ambient conditions (room temperature).

10.2 Matter which should be avoided:
Oxidant agents.

10.3 Hazardous decomposition products:
No specific data.

10.4 Complementary information:
The gases/fumes can form explosive mixtures with the air.

11. Toxicological information

11.1 Acute toxicity:
LD50 oral rat : 2.080 mg/kg
LC50 inh mus : 23000 mg/m3
LC50 inh rat : 8200 mg/m3 4h

11.2 Dangerous effects for health:

Upon contact with the skin: irritations Through contact with the eyes: irritations If swallowed: gastro-intestinal disorders Systemic effects: headaches intoxication nausea narcosis

12. Environmental information

12.1 Toxicity:

12.1.1 - EC50 test (mg/l):
Bacteria (Photobacterium phosphoreum) 80 mg/l
Classification:
Extr. toxic
Crustaceans (Daphnia magna) 4280 mg/l
Classification:
Very toxic
Fish 460 mg/l
Classification:
Highly toxic
12.1.2. - Receptor medium:
Risk for the water environment
Medium
Risk for the land environment
Low
12.1.3. - Observations:
Acute ecotoxicity in line with the dumping concentration.

12.2 Persistence and Degradability :

12.2.1 - Test:
12.2.2. - Biotic degradation classification:
ThOD 2,72 g/g
BOD5/COD
Biodegradability
BODD = 4,4D % ThOD/5d
Medium, between 1/3 and 1/10
12.2.3. - Abiotic degradation depending on pH:
DOCD 79D % ThOD
12.2.4. - Observations:
Biodegradable product.

12.3 Bioaccumulative potential:

12.3.1. - Test:
12.3.2. - Bioaccumulation:
Risk
12.3.3. - Observations:
Non-bioaccumulable product.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other possible effects on the environment:

Hardly pollutant product.
Do not allow it to enter soils or water channels.

13. 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.
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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.
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14. Information concerning transport

Overland (ADR):
Technical name: METHYL ISOBUTYL KETONE
UN 1245 Class: 3 Packaging group: II (D/E)
By sea (IMDG):
Technical name: METHYL ISOBUTYL KETONE
UN 1245 Class: 3 Packaging group: II EMS 2731
By air (ICAI-IATA):
Technical name: Methyl isobutyl ketone
UN 1245 Class: 3 Packaging group: II
Packaging instructions: CAO 364 PAX 353

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. Other information

Other precautionary statements

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash...thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
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-phrase(s):	**R66** Repeated exposure may cause skin dryness or cracking. **R36/37** Irritating to eyes and respiratory system. **R20** Harmful by inhalation. **R11** Highly flammable.
S-phrase(s):	**S29** Do not empty into drains. **S16** Keep away from sources of ignition - No smoking. **S9** Keep container in a well-ventilated place.

Review number and date: 4 15.09.2011
Date published: 15.09.2011
In respect of the previous review, changes have been made to the following sections: 15
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.