

N,N-DIMETHYLACETAMIDE

0259

September 1993

CAS No: 127-19-5
RTECS No: AB7700000
EC No: 616-011-00-4

Acetic acid dimethylamide
Dimethylacetamide
 $\text{CH}_3\text{CON}(\text{CH}_3)_2$
Molecular mass: 87.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Powder, alcohol-resistant foam, water spray, carbon dioxide.
EXPLOSION	Above 70/C explosive vapour/air mixtures may be formed.	Above 70/C closed system, ventilation, and explosion-proof electrical equipment.	

EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
Inhalation	Headache. Nausea. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness. (Further see Inhalation).	Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
Eyes	VAPOUR WILL BE ABSORBED! Redness. Pain.	Face shield.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal cramps. Diarrhoea. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place.	EU classification T Symbol R: 61-20/21 S: 53-45

EMERGENCY RESPONSE	SAFE STORAGE
NFPA Code: H 2; F 2; R 0	Well closed. Ventilation along the floor.

IMPORTANT DATA

Physical State; Appearance

OILY, COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers

The substance decomposes on heating producing toxic fumes (nitrogen oxides). Attacks many plastics.

Occupational exposure limits

TLV: 10 ppm as TWA; (skin); A4 (not classifiable as a human carcinogen); BEI issued (ACGIH 2005).
MAK: 10 ppm, 36 mg/m³; Peak limitation category: II(2); skin absorption (H); Pregnancy risk group: C; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation and through the skin.

Inhalation risk

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20/C.

Effects of short-term exposure

The substance is irritating to the eyes and the skin.

Effects of long-term or repeated exposure

The liquid defats the skin. The substance may have effects on the central nervous system and liver.

PHYSICAL PROPERTIES

Boiling point: 165/C

Melting point: -20/C

Relative density (water = 1): 0.94

Solubility in water: miscible

Vapour pressure, kPa at 20/C: 0.33

Relative vapour density (air = 1): 3.01

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.01

Flash point: 70/C (o.c.)

Auto-ignition temperature: 490/C

Explosive limits, vol% in air: 1.8 (at 100/C) - 11.5 (at 160/C)

Octanol/water partition coefficient as log Pow: -0.77

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to soil contamination.

NOTES

Use of alcoholic beverages enhances the harmful effect.

Depending on the degree of exposure, periodic medical examination is suggested.

No odour warning if toxic concentrations are present.

Absorption through the skin proceeds very quickly. Most types of protective gloves are not entirely effective.

Card has been partly updated in October 2005. See sections Occupational Exposure Limits, EU classification, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information