

# VALERIC ACID

0346

March 2002

**CAS No: 109-52-4**  
**RTECS No: YV6100000**  
**UN No: 3265**  
**EC No: 607-143-00-3**

Pentanoic acid  
 Propylacetic acid  
 1-Butanecarboxylic acid  
 n-Pentanoic acid  
 $C_5H_{10}O_2 / CH_3(CH_2)_3COOH$   
 Molecular mass: 102.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Combustible.	NO open flames.	Powder, water spray, foam, carbon dioxide.
<b>EXPLOSION</b>	Above 86°C explosive vapour/air mixtures may be formed.	Above 86°C use a closed system, ventilation.	

EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
<b>Inhalation</b>	Burning sensation. Cough. Sore throat.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness. Pain. Skin burns.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
<b>Eyes</b>	Redness. Pain. Severe deep burns.	Face shield.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Burning sensation. Abdominal pain. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Collect leaking liquid in covered containers. Wash away spilled liquid with plenty of water. Do NOT let this chemical enter the environment.	C Symbol R: 34-52/53 S: (1/2-)26-36-45-61 UN Hazard Class: 8

EMERGENCY RESPONSE	STORAGE
NFPA Code: H2; F2; R0; Transport Emergency Card: TEC (R)-80GC3-II+III	Separated from strong bases.

### IMPORTANT DATA

**Physical State; Appearance**

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

**Physical dangers**

The vapour is heavier than air.

**Chemical dangers**

The substance is a weak acid.

**Occupational exposure limits**

TLV not established.

**Routes of exposure**

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

**Inhalation risk**

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20°C.

**Effects of short-term exposure**

The substance is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion.

### PHYSICAL PROPERTIES

Boiling point: 186-187°C

Melting point: -34.5°C

Relative density (water = 1): 0.94

Solubility in water, g/100 ml: 2.4

Vapour pressure, kPa at 20°C: 0.02

Relative vapour density (air = 1): 3.52

Flash point: 86°C c.c.

Auto-ignition temperature: 400°C

Explosive limits, vol% in air: 1.6-7.6

Octanol/water partition coefficient as log Pow: 1.39

### ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

### NOTES

### 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