

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product Name : 35% v/v (+/-)-2-Methyl-2,4-pentanediol
Product Number : HR2-863
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
CAS Number : 107-41-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the Safety Data Sheet

Company : Hampton Research
34 Journey
Aliso Viejo, CA 92656-3317
United States
Telephone : 949 425 1321
Telephone technical support is available 8:00 a.m. to 4:30 p.m. USA Pacific Standard Time.
Fax : 949 425 1611
Fax Technical Support is available 24 hours a day.
e-mail : tech@hrmail.com
e-mail Technical Support is available 24 hours a day.

1.4 Emergency telephone number

Emergency phone : 949 425 1321
For **CHEMTREC** Assistance : 800 424 9300
For **CHEMTREC** Assistance : 703 527 3887 (International)

SECTION 2: Hazards Identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Skin irritation (Category 2), H315

For the full text of the H-Statements mentioned in this Section, see Section 16

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi Irritant R36/38

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

(CONTINUED) - SECTION 2: Hazards Identification

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word : Warning

Hazard statement(s)

H315 : Causes skin irritation.

H319 : Causes serious eye irritation.

Precautionary statement(s)

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 : IF eye irritation persists: Get medical advice/attention.

Supplemental Hazard Statements : none

2.3 Other hazards - none

SECTION 3: Composition/Information On Ingredients

3.1 Substances

Substance Name	(+/-)-2-Methyl-2,4-pentanediol
Synonym	MPD or Hexylene glycol
Formula	C ₆ H ₁₄ O ₂ or CH ₃ CH(OH)CH ₂ C(CH ₃) ₂ OH
M_r	118.18
CAS #	107-41-5
EC #	203-489-0

RTECS	Merck	Beilstein	SARA	MDL #	PubChem Substance ID
SA0810000	14,4710	1098298	No	MFCD00004547	329760818

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
2-Methylpentane-2,4-diol		
CAS-No. 107-51-7	Skin Irrit. 2; Eye Irrit. 2; H315, H319	<= 100 %
EC-No. 203-489-0		
Index-No. 603-053-00-3		

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
2-Methylpentane-2,4-diol		
CAS-No. 107-51-7	Xi, R36/38	<= 100 %
EC-No. 203-489-0		
Index-No. 603-053-00-3		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes as a precaution and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

None known

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further Information

no data available

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
For personal protection see section 8.

(CONTINUED) - SECTION 6: Accidental Release Measures

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and Storage

7.1 Personal Precautions

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic. Air sensitive. Store under inert gas.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(CONTINUED) - SECTION 8: Exposure Controls/Personal Protection

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm

Break through time: 480 min

Material tested: Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Liquid	Color: Clear, Colorless
b) Odor	no data available	
c) Odor Threshold	no data available	
d) pH	no data available	
e) Melting point/freezing point	Melting point/range: -40°C - lit.	
f) Initial boiling point and boiling range	197°C - lit.	
g) Flash point	94°C - closed cup / 201.2°F	
h) Evaporation rate	no data available	
i) Flammability (solid, gas)	no data available	
j) Upper/lower flammability or explosive limits	Upper explosion limit: 7,4 %(V) Lower explosion limit: 1,3 %(V)	
k) Vapor pressure	0,02 mmHg at 20°C (lit.)	
l) Vapor density	4,10 - (Air = 1.0)	
m) Relative density	0,925 g/mL at 25°C	
n) Water solubility	ca.118,2 g/l at 20 °C	
o) Partition coefficient: noctanol/water	log Pow: -0,14	

(CONTINUED) - SECTION 9: Physical and Chemical Properties

- p) Autoignition temperature no data available
q) Decomposition temperature no data available
r) Viscosity no data available
s) Explosive properties no data available
t) Oxidizing properties no data available

9.2 Other safety information

Relative vapour density 4,10 - (Air = 1.0)

SECTION 10: Stability and Reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Avoid moisture.

10.5 Incompatible materials

Strong acids, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 3.700 mg/kg

LD50 Dermal - rabbit - 7.892 mg/kg

Serious eye damage/eye irritation

Eyes - rabbit

Result: Severe eye irritation

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Skin / irritation and corrosion

Skin - rabbit

Result: Skin irritation - 24 h

(CONTINUED) - SECTION 11: Toxicological Information

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information

RTECS: SA0810000

SECTION 12: Ecological Information

12.1 Toxicity

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 10.700 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 3.200 mg/l - 48 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 16: Other Information

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	: Eye irritation
H315	: Causes skin irritation.
H319	: Causes serious eye irritation.
Skin Irrit.	: Skin irritation

Full text of R-phrases referred to under sections 2 and 3

Xi	: Irritant
R36/38	: Irritating to eyes and skin.

DISCLAIMER

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WARRANTY

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