



Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date: 08.12.2010

Revision: 08.12.2010

1 Identification of the substance/preparation and of the company/undertaking

Product name: **2,4,7,9-Tetramethyl-5-decyne-4,7-diol**
Application of the substance/the preparation: Chemical intermediate; chemical speciality
Manufacturer/Supplier: VUP, a.s.
Nábrežná 4
971 04 Prievidza, Slovakia
Tel: 00421-46-5430841
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2 Hazards identification**Classification according to Regulation (EC) No 1272/2008**

Eye Irrit. 2
Aquatic Chronic 3

Label elements

Pictograms: 

Signal word: Warning

Hazard statements:

H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273: Avoid release to the environment.
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.

Classification and labelling according to Directive 67/548/EEC**Hazard description:**

Xi Irritant

Risk Phrases:

R 36 Irritating to eyes.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.
S 61 Avoid release to the environment, refer to special instructions/safety data sheet.

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Product name: **2,4,7,9-Tetramethyl-5-decyne-4,7-diol**

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3 Composition/information on ingredients

Synonyms: 2,4,7,9-Tetramethyldec-5-yne-4,7-diol
Molecular Formula: C₁₄H₂₆O₂
Molecular Weight: 226.36 g/mol

Name	CAS	EINECS	Classification	Concentration
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	126-86-3	204-809-1	Eye Irrit. 2; Aquatic Chronic 3; H319; H412; Xi, R36, R52/53	min. 99 %

For the full text of the H-Statements mentioned in this Section, see Section 2.

4 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 and consult a physician.

If swallowed

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

5 Fire-fighting measures

Suitable extinguishing media:

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

Special protective equipment for fire-fighters:

Wear self contained breathing apparatus for fire fighting if necessary.

6 Accidental release measures

Personal precautions:

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions:

Do not let product enter drains.

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.

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Product name: **2,4,7,9-Tetramethyl-5-decyne-4,7-diol**

(Contd. of page 2)

7 Handling and storage

Handling:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

Storage:

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

8 Exposure controls/personal protection

Contains no substances with occupational exposure limit values.

Personal protective equipment

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).

Hand protection:

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

Eye protection:

Safety glasses with side-shields conforming to EN166.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:

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

9 Physical and chemical properties

Appearance

Physical State:	solid
Color:	white
Odour:	peppermint odour

Safety data

pH:	not available
Boiling Point:	255 °C
Freezing/Melting Point:	38 - 42 °C
Autoignition Temperature:	305 °C (injected as a liquid at 60 °C)
Flash Point:	136+1 °C
Explosion Limits, lower:	0.71±0.01 vol. % (injected as a liquid at 60 °C)
Explosion Limits, upper:	not available
Vapour pressure:	0.47 kPa at 125 °C
Vapour density (air=1):	4.34
Solubility in water:	0.1 %
Viscosity:	5.9 mPas at 80 °C 29.3 mPas at 50 °C
Gravity:	883 kg/m ³

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10 Stability and reactivity

Storage stability: Stable under recommended storage conditions.

Materials to avoid: Strong oxidizing agents, Acid chlorides, Acid anhydrides, Strong bases.

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides.

11 Toxicological information

Acute toxicity:

oral-rat LD₅₀ > 4 600 mg/kg

dermal-rabbit LD₅₀ > 1 000 mg/l (1 h)

inhal-rat LC₅₀ > 20 mg/l (1 h)

Carcinogenicity

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.

Signs and Symptoms of Exposure

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

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes serious eye irritation.

Ingestion: May be harmful if swallowed.

12 Ecological information

Ecotoxicity:

EC₅₀ Daphnia magna (48 h): 91 mg/l

EC₅₀ Daphnia magna (24 h): 83-130 mg/l

EC₅₀ MICROTOX Luminiscent bacteria (5 min): 125-191 mg/l

EC₅₀ Algae (72 h): 15 mg/l

LC₅₀ Carp (24 h): 42 mg/l

LC₅₀ Carp (96 h): 42 mg/l

This product difficult subject to degradation (OECD 301 B): 5 %, 28 days

13 Disposal considerations

Product:

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging:

Dispose of as unused product.

14 Transport information

Land transport ADR/RID: Not regulated as a hazardous material.

Maritime transport IMDG: Not regulated as a hazardous material.

Air transport ICAO-TI and IATA-DGR: Not regulated as a hazardous material.

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15 Regulatory information

This safety datasheet complies with the requirements of Regulation No 1907/2006/EC, Regulation No 1272/2008/EC and Regulation No 453/2010.

16 Other information

This Safety Data Sheet is not a Product Specification. It is based on our present knowledge and experience and it is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.

Abbreviations and acronyms:

CAS	Chemical Abstracts Service registry number
EC	European Commission number (for European Inventory of Existing Chemical Substances)
Eye Irrit.	Eye Irritation
LD ₅₀	Median lethal dose
LC ₅₀	Lethal concentration, 50 percent
EC ₅₀	Half maximal effective concentration
ADR	Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID	Règlement internationale concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG	International Maritime Code for Dangerous Goods
ICAO	International Civil Aviation Organization
ICAO-TI	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
IATA	International Air Transport Association
IATA-DGR	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2
Aquatic Chronic 3

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