SIGMA-ALDRICH

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.1 Revision Date 19.12.2013 Print Date 31.08.2016 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifiers Product name	:	1-Vinylimidazole
	Product Number Brand REACH No. CAS-No.	:	235466 Aldrich 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. 1072-63-5
1.2	Relevant identified uses	of th	e 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		safety data sheet
	Company	:	Sigma-Aldrich Chemie GmbH Riedstrasse 2 D-89555 STEINHEIM
	Telephone Fax E-mail address	::	+49 89-6513-1444 +49 7329-97-2319 eurtechserv@sial.com
1.4	Emergency telephone number		
	Emergency Phone #	:	+49 7329-97-2323
SECT	ION 2: Hazards identificat	ion	
2.1	Classification of the substance or mixture		
	Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Category 1B), H314		
	For the full text of the H-Sta	atem	ents mentioned in this Section, see Section 16.
	Classification according C Corrosive	to E	U Directives 67/548/EEC or 1999/45/EC R22, R34

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 Pictogram

Signal wordDangerHazard statement(s)Harmful if swallowed.H302Harmful if swallowed.H314Causes severe skin burns and eye damage.

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.
P310	Immediately call a POISON CENTER or doctor/ physician.
Supplemental Hazard Statements	none

2.3 Other hazards - none

3.1

SECTION 3: Composition/information on ingredients

Substances	
Formula	: C ₅ H ₆ N ₂
Molecular Weight	: 94,11 g/mol
CAS-No.	: 1072-63-5
EC-No.	: 214-012-0

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

	<u> </u>		
Component		Classification	Concentration
1-Vinylimidazole			
CAS-No.	1072-63-5	Acute Tox. 4; Skin Corr. 1	3; <= 100 %
EC-No.	214-012-0	H302, H314	

Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
1-Vinylimidazole			
CAS-No. EC-No.	1072-63-5 214-012-0	C, R22 - R34	<= 100 %

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

Take off contaminated clothing and shoes immediately. 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

Do NOT induce vomiting. 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: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

- 5.2 Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx)
- **5.3** Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information Use water spray to cool unopened containers.

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. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

hygroscopic Light sensitive.

7.3 Specific end use(s)

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

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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.

Full contact Material: butyl-rubber Minimum layer thickness: 0,3 mm Break through time: > 480 min Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact Material: Nature latex/chloroprene Minimum layer thickness: 0,6 mm Break through time: 93 min Material tested:Lapren® (KCL 706 / Aldrich Z677558, 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

Complete suit protecting against chemicals, 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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

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9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid Colour: brown
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	no data available
f)	Initial boiling point and boiling range	78 - 79 °C at 17 hPa - lit. 192 - 194 °C - lit.
- 235	466	

	g) Flash point 81 °C - closed cup				
	h)	Evapouration rate	no data available		
	i)	Flammability (solid, gas)	no data available		
	j)	Upper/lower flammability or explosive limits	no data available		
	k)	Vapour pressure	no data available		
	I)	Vapour density	no data available		
	m)	Relative density	1,039 g/cm3 at 25 °C		
	n)	Water solubility	no data available		
	o)	Partition coefficient: n- octanol/water	no data available		
	p)	Auto-ignition 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 no data available				
SECT	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 Heat, flames and sparks.				
10.5	Incompatible materials Strong oxidizing agents, Strong acids				
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	Info	ormation on toxicologica	l effects		

Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation no data available Aldrich - 235466

Germ cell mutagenicity

no data available

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.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

no data available

Aspiration hazard

no data available

Additional Information

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

SECTION 12: Ecological information

- 12.1 Toxicity no data available
- **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

12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number ADR/RID: 3267

IMDG: 3267

IATA: 3267

14.2 UN proper shipping name

ADR/RID:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (1-Vinylimidazole)
IMDG:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (1-Vinylimidazole)
IATA:	Corrosive liquid, basic, organic, n.o.s. (1-Vinylimidazole)

14.3	Transport hazard class(es) ADR/RID: 8	IMDG: 8	IATA: 8
14.4	Packaging group ADR/RID: II	IMDG: II	IATA: II
14.5	Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6	Special precautions for user no data available		

SECTION 15: Regulatory information

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

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

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

С	Corrosive
R22	Harmful if swallowed.
R34	Causes burns.

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.