# SIGMA-ALDRICH

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.3 Revision Date 13.06.2014 Print Date 10.02.2016 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 :	N,N'-Methylenebis(acrylamide)		
	Product Number : Brand : REACH No. : CAS-No. :	146072 Sigma-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. 110-26-9		
1.2	Relevant identified uses of t	he 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 :	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		
SEC	SECTION 2: Hazards identification			
2.1	Classification of the substance or mixture			
	Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Oral (Category 4), H302			
	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 Xn Harmful R20/22			
	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		ion (EC) No 1272/2008		
	Signal word	Warning		
	Hazard statement(s) H302 H332	Harmful if swallowed. Harmful if inhaled.		
	Precautionary statement(s)	none		

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#### 2.3 Other hazards - none

#### **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Synonyms	:	Bis-acrylamide
Formula	:	C <sub>7</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>
Molecular Weight	:	154,17 g/mol
CAS-No.	:	110-26-9
EC-No.	:	203-750-9

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

Component		Classification	Concentration
N,N'-Methylenediacr	ylamide		
CAS-No. EC-No.	110-26-9 203-750-9	Acute Tox. 4; H302, H332	<= 100 %

Hazardous ingredients according to Directive 1999/45/EC			
Component		Classification	Concentration
N,N'-Methylenediacr	ylamide		
CAS-No.	110-26-9	Xn, R20/22	<= 100 %
EC-No.	203-750-9		

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

Flush eyes with water as a precaution.

#### 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: 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 no data available

### **SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
- 6.2 Environmental precautions Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. 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 formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 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.

Recommended storage temperature: 2 - 8 °C

Air and 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

Safety glasses with side-shields conforming to EN166 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: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, 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**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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: solid
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	Melting point/range: > 300 °C
f)	Initial boiling point and boiling range	no data available
g)	Flash point	no data available
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	5,32 - (Air = 1.0)
m)	Relative density	no data available
n)	Water solubility	20 g/l at 20 °C - completely soluble
o)	Partition coefficient: n-	no data available
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octanol/water

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

Relative vapour density 5,32 - (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** Exposure to air.

#### **10.5** Incompatible materials Acids, Bases, Oxidizing agents, Reducing agents, Iron

Acids, Bases, Oxidizing agents, Reducing agents, Iron and iron salts., Copper, Aluminum, Brass, Free radical initiators

#### **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 - 390 mg/kg Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Behavioral:Tremor. Lungs, Thorax, or Respiration:Other changes.

# Skin corrosion/irritation

no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation no data available

#### 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

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

**Additional Information** RTECS: AS3678000

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

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h

- 12.2 Persistence and degradability no data available
- **Bioaccumulative potential** 12.3 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

Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

SECTION 14: Transport information			
14.1	<b>UN number</b> ADR/RID: -	IMDG: -	IATA: -
14.2	UN proper shipping nameADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods		
14.3	<b>Transport hazard class(es)</b> ADR/RID: -	IMDG: -	IATA: -
14.4	<b>Packaging group</b> ADR/RID: -	IMDG: -	IATA: -
14.5	Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6	Special precautions for user no data available		
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# **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.

Acute Tox.	Acute toxicity
H302	Harmful if swallowed.
H332	Harmful if inhaled.

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

Xn	Harmful
R20/22	Harmful by inhalation and if swallowed.

#### **Further information**

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