# **SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006 Version 6.0 Revision Date 30.03.2016 Print Date 16.02.2017

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 : Acrylamide/bis-acrylamide, 40% solution

Product Number : A7168 Brand : Sigma

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.

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 : Sigma-Aldrich Pte Ltd

(Co. Registration No. 199403788W)

1 Science Park Road

#02-14 The Capricorn, S'pore Sci. PkII

SINGAPORE 117528

**SINGAPORE** 

Telephone : +65 6779-1200 Fax : +65 6779-1822

1.4 Emergency telephone number

Emergency Phone # : 1-800-262-8200

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

Skin sensitisation (Category 1), H317

Germ cell mutagenicity (Category 1B), H340

Carcinogenicity (Category 1B), H350

Reproductive toxicity (Category 2), H361f

Specific target organ toxicity - repeated exposure (Category 1), H372

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

### 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger Hazard statement(s) Harmful if swallowed or if inhaled H302 + H332 H315 Causes skin irritation. H317 May cause an allergic skin reaction. Causes serious eve irritation. H319 H340 May cause genetic defects. H350 May cause cancer. H361f Suspected of damaging fertility. H372 Causes damage to organs through prolonged or repeated exposure. Precautionary statement(s) Obtain special instructions before use. P201 P280 Wear protective gloves. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention. Supplemental Hazard none

Statements

Restricted to professional users.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

#### 3.2 **Mixtures**

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

Component		Classification	Concentration	
<b>Acrylamide</b> Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)				
CAS-No. EC-No. Index-No. Registration number	79-06-1 201-173-7 616-003-00-0 01-2119463260-48-XXXX	Carc. 1B; Muta. 1B; Repr. 2; Acute Tox. 3; STOT RE 1; Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; H350, H340, H361f, H301, H372, H332, H312, H319, H315, H317	>= 30 - < 50 %	
N,N'-Methylenediacrylamide				
CAS-No. EC-No.	110-26-9 203-750-9	Acute Tox. 4; H332, H302	>= 1 - < 10 %	

For the full text of the H-Statements 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. Take victim immediately to hospital. Consult a physician.

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### 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.

### 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), Ammonia

Carbon oxides, Nitrogen oxides (NOx)

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting 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. Evacuate personnel to safe 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. Discharge into the environment must be avoided.

### 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 Precautions for safe handling

Avoid exposure - obtain special instructions before use. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2 - 8 °C

Light sensitive. Store under inert gas.

Storage class (TRGS 510): Non Combustible Liquids, Toxic

### 7.3 Specific end use(s)

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

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#### **SECTION 8: Exposure controls/personal protection**

### 8.1 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

Face shield and safety glasses 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:

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: > 480 min

Material tested:

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 industria 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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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. Discharge into the environment must be avoided.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

b) Odour No data available

c) Odour Threshold No data available

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d)	pН	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available
g)	Flash point	No data available
h)	Evaporation 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
l)	Vapour density	No data available
m)	Relative density	No data available
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

### **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

No data available

### 10.5 Incompatible materials

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

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Ammonia

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available

In the event of fire: see section 5

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### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological 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

### Germ cell mutagenicity

No data available

### Carcinogenicity

IARC: 2A - Group 2A: Probably carcinogenic to humans (Acrylamide)

### 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

### **Additional Information**

RTECS: Not available

Acrylamide toxicity is manifested as a sensorimotor peripheral neuropathy.

### **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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Harmful to aquatic life.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

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

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### **Contaminated packaging**

Dispose of as unused product.

### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 3426 IMDG: 3426 IATA: 3426

14.2 UN proper shipping name

ADR/RID: ACRYLAMIDE SOLUTION IMDG: ACRYLAMIDE SOLUTION ACRYLAMIDE SOLUTION Acrylamide solution

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

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**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Authorisations and/or restrictions on use

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

H301

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

Toxic if swallowed.

H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolon

H372 Causes damage to organs through prolonged or repeated exposure.

#### **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.

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