

Printing date 06/11/2015 Reviewed on 06/10/2015

1 Identification

- · Product identifier
- · Trade name: Premix Acrylamide/Bis 19:1
- · Catalog or product number: 1610120, 1610123, 1610123EDU, 10040494
- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Bio-Rad Laboratories, Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547

(510)741-1000

· Information department:

Technical services, customer support

Isg techserv us@bio-rad.com

· Emergency telephone number:

1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

510-741-1000

2 Hazard(s) identification

· Classification of the substance or mixture

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS06 GHS07 GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

acrylamide

N,N'-methylenediacrylamide

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· Hazard statements

H301 Toxic if swallowed.

H312+H332 Harmful in contact with skin or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H340 May cause genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information: Contact with acids may cause release of toxic gases

· Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description: 79-06-1 acrylamide

· Identification number(s):

· EC number: 201-173-7

· Index number: 616-003-00-0

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with non-hazardous additions.

· Listing of dangerous and non-hazardous components:

| 79-06-1 | acrylamide | 50-100% |
|----------|----------------------------|---------|
| 110-26-9 | N,N'-methylenediacrylamide | 2.5-5% |

· Additional information For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

- · Description of first aid measures
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Induce vomiting and call for medical help.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

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· Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

79-06-1 acrylamide

PEL () 0.3 mg/m³ Skin REL () 0.03 mg/m³ Skin TLV () 0.03 IV mg/m³ Skin

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- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures Wash hands before breaks and at the end of work.
- · Protection of hands:

Only use chemical-protective gloves with CE-labeling of category III.

Protective gloves.

- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

| Information on basic physical and | chemical properties | |
|-----------------------------------|---|--|
| General Information | | |
| Appearance: Form: | Solid | |
| Color: | White | |
| Odor: | sulphurous | |
| Odour threshold: | Not determined. | |
| pH-value: | Not applicable. | |
| Change in condition | | |
| Melting point/Melting range: | 84-85 °C | |
| Boiling point/Boiling range: | 125 ℃ | |
| Flash point: | Not applicable | |
| Flammability (solid, gaseous) | Not determined. | |
| Ignition temperature: | | |
| Decomposition temperature: | Not determined. | |
| Auto igniting: | Product is not selfigniting. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| Vapor pressure at 20 °C: | 0.009 hPa | |
| Density at 20 °C: | 1.03 g/cm³ | |
| Relative density | Not determined. | |
| Vapour density | Not applicable. | |
| Evaporation rate | Not applicable. | |
| Solubility in / Miscibility with | | |
| Water at 20 °C: | 400 g/l | |
| | Fully miscible | |

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Partition coefficient (n-octanol/water): Not determined.
 Viscosity:
 dynamic:
 kinematic:
 Not applicable.

 Solvent content:
 Organic solvents:
 0.0 %

 Solids content:
 100.0 %
 No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide

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|-------|--------|---------|-------|
| | | | |

- · Information on toxicological effects
- · Acute toxicity:

| • | LD/ | LC5 | U V | alues | tor | nazardous | components | per | OSHA | criteria: |
|---|-----|-----|-----|-------|-----|-----------|------------|-----|------|-----------|
| | | | | | | | | | | |

79-06-1 acrylamide

Oral LD50 124 mg/kg (rat)
Dermal LD50 400 mg/kg (rat)

- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

79-06-1 acrylamide

| · IARC (International | Agency for Research | h on Cancer) |
|-----------------------|---------------------|------------------|
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79-06-1 acrylamide 2A

· NTP (National Toxicology Program)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water danger class 3 (Internal calculation) (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Hand over to hazardous waste disposers.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| 14 Transport information | |
|--|--|
| · UN-Number · DOT, ADR, IMDG, IATA | UN2074 |
| · UN proper shipping name · ADR · IMDG · IATA | 2074 ACRYLAMIDE, mixture ACRYLAMIDE, SOLID, mixture ACRYLAMIDE MIXTURE |
| · Transport hazard class(es) | |
| · DOT, ADR, IMDG, IATA | |
| · Class | 6.1 Toxic substances |
| · Label | 6.1 |
| · Packing group · DOT, ADR, IMDG, IATA | III |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Warning: Toxic substances |
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Danger code (Kemler): 60

· EMS Number: F-A,S-A

· Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code Not applicable.

· Transport/Additional information:

· DOT

· Remarks: Lösung: EmS 6.1-02

· UN "Model Regulation": UN2074; ACRYLAMIDE, SOLID, mixture; 6.1; III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

79-06-1 acrylamide

Section 313 (40CFR372.65):

79-06-1 acrylamide

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · California Proposition 65:
- · Chemicals known to cause cancer:

79-06-1 acrylamide

· Developmental Toxicity

79-06-1 acrylamide

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

79-06-1 acrylamide B2

· TLV (Threshold Limit Value established by ACGIH)

79-06-1 acrylamide А3

· MAK (German Maximum Workplace Concentration)

· NIOSH-Ca (National Institute for Occupational Safety and Health)

79-06-1 acrylamide

79-06-1 acrylamide

· National regulations

· Technical instructions (air):

| Class | Share in % |
|-------|------------|
| 11 | 50-100 |

· Water hazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.

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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of preparation / last revision 06/11/2015 / -
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Muta. 1B: Germ cell mutagenicity, Hazard Category 1B

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

· * Data compared to the previous version altered.

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