

MB045 - Acrylamide/bis-Acrylamide (29:1 solution)

Date of compilation: 06/01/2020



Revised: 01/04/2024

Version: 3 (Replaced 2)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** MB045 - Acrylamide/bis-Acrylamide (29:1 solution)
Other means of identification:
Not relevant
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Laboratory. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
NZYtech, Lda
Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c
1649-038 Lisboa - Lisboa - Portugal
Phone: +351 213643514
info@nzytech.com
www.nzytech.com
- 1.4 Emergency telephone number:** National Poison Center (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your regional Poisons Information Service or call local Life Saving Service.

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Acute Tox. 3: Acute toxicity if swallowed, Category 3, H301
Acute Tox. 4: Acute toxicity on contact with skin, Category 4, H312
Carc. 1B: Carcinogenicity, Category 1B, H350
Eye Irrit. 2: Eye irritation, Category 2, H319
Muta. 1B: Germ cell mutagenicity, Category 1B, H340
Repr. 2: Reproductive toxicity, Category 2, H361
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1: Sensitisation, skin, Category 1, H317
STOT RE 1: Specific target organ toxicity — Repeated exposure, Hazard Category 1, H372
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2 (Oral), H373
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger
-  
- Hazard statements:**
Acute Tox. 3: H301 - Toxic if swallowed.
Acute Tox. 4: H312 - Harmful in contact with skin.
Carc. 1B: H350 - May cause cancer.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Muta. 1B: H340 - May cause genetic defects.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).
- Precautionary statements:**

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SECTION 2: HAZARDS IDENTIFICATION (continued)

P201: Obtain special instructions before use.
 P264: Wash thoroughly after handling.
 P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P302+P352: IF ON SKIN: Wash with plenty of water.
 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.
 P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

acrylamide; N,N'-methyleneacrylamide

Additional Labelling:

Restricted to professional users

UFI: 8Q90-H0SM-S00T-KQ61

2.3 Other hazards:

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | Concentration |
|---|---|-----------------------|
| CAS: 79-06-1 EC: 201-173-7 Index: 616-003-00-0 REACH: 01-2119485824-26-XXXX | acrylamide⁽¹⁾ ATP CLP00 Regulation 1272/2008 Acute Tox. 3: H301; Acute Tox. 4: H312+H332; Carc. 1B: H350; Eye Irrit. 2: H319; Muta. 1B: H340; Repr. 2: H361f; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT RE 1: H372 - Danger | 25 - <50 % |
| CAS: 110-26-9 EC: 203-750-9 Index: Non-applicable REACH: 01-2120745928-38-XXXX | N,N'-methyleneacrylamide⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 3: H301; Acute Tox. 4: H312+H332; Carc. 1B: H350; Muta. 1B: H340; Repr. 2: H361; STOT RE 1: H372 - Danger | 2,5 - <10 % |

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

| Identification | Acute toxicity | | Genus |
|--|-----------------|----------------|--------|
| | Route | Dose | |
| acrylamide CAS: 79-06-1 EC: 201-173-7 | LD50 oral | 124 mg/kg | Rat |
| | LD50 dermal | 1100 mg/kg | Rat |
| | LC50 inhalation | 11 mg/L (ATEi) | |
| N,N'-methyleneacrylamide CAS: 110-26-9 EC: 203-750-9 | LD50 oral | 100 mg/kg | Rat |
| | LD50 dermal | 1141 mg/kg | Rabbit |
| | LC50 inhalation | 11 mg/L (ATEi) | |

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

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SECTION 4: FIRST AID MEASURES (continued)**By inhalation:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Induce vomiting (ONLY IF PERSON IS CONSCIOUS!) and then ingest large quantities of liquid to dilute the toxin. Keep the person affected at rest.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Not relevant

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media:****Suitable extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the split product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

| Identification | Occupational exposure limits | |
|--|------------------------------|-----------------------|
| | IOELV (8h) | 0,1 mg/m ³ |
| acrylamide ⁽¹⁾ CAS: 79-06-1 EC: 201-173-7 | IOELV (STEL) | |

⁽¹⁾ Likely absorption through the skin

DNEL (Workers):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Identification | | Short exposure | | Long exposure | |
|--|------------|-----------------------|-----------------------|---------------|--------------|
| | | Systemic | Local | Systemic | Local |
| acrylamide CAS: 79-06-1 EC: 201-173-7 | Oral | Not relevant | Not relevant | Not relevant | Not relevant |
| | Dermal | 3 mg/kg | Not relevant | Not relevant | Not relevant |
| | Inhalation | 120 mg/m ³ | 120 mg/m ³ | Not relevant | Not relevant |
| N,N'-methyleneacrylamide CAS: 110-26-9 EC: 203-750-9 | Oral | Not relevant | Not relevant | Not relevant | Not relevant |
| | Dermal | 3 mg/kg | Not relevant | Not relevant | Not relevant |
| | Inhalation | Not relevant | Not relevant | Not relevant | Not relevant |

DNEL (General population):

Not relevant

PNEC:

| Identification | | | | |
|---|--------------|--------------|-------------------------|--------------|
| acrylamide CAS: 79-06-1 EC: 201-173-7 | STP | 0,2 mg/L | Fresh water | 0,032 mg/L |
| | Soil | Not relevant | Marine water | 0,002 mg/L |
| | Intermittent | 0,32 mg/L | Sediment (Fresh water) | Not relevant |
| | Oral | Not relevant | Sediment (Marine water) | Not relevant |



8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment



In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|-----------------------------------|---|---------------------|--|
|  Mandatory respiratory tract protection | Filter mask for gases and vapours |  | EN 405:2002+A1:2010 | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|--|---|-------------------|--|
|  Mandatory hand protection | Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.11 mm) |  | EN ISO 21420:2020 | Replace the gloves at any sign of deterioration. |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|-------------|---|---|---|
|  Mandatory face protection | Face shield |  | EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

E.- Body protection

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|--|---|
|  Mandatory complete body protection | Disposable clothing for protection against chemical risks |  | EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994 | For professional use only. Clean periodically according to the manufacturer's instructions. |
|  Mandatory foot protection | Safety footwear for protection against chemical risk |  | EN ISO 20345:2011 EN 13832-1:2019 | Replace boots at any sign of deterioration. |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|--|--|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

| | |
|---------------------------|-----------------------------|
| V.O.C. (Supply): | 0 % weight |
| V.O.C. density at 20 °C: | 0 kg/m ³ (0 g/L) |
| Average carbon number: | Not relevant |
| Average molecular weight: | Not relevant |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|----------------|
| Physical state at 20 °C: | Liquid |
| Appearance: | Not available |
| Colour: | Colourless |
| Odour: | Characteristic |
| Odour threshold: | Not relevant * |

Volatility:

| | |
|--|-------------------------|
| Boiling point at atmospheric pressure: | 100 °C |
| Vapour pressure at 20 °C: | 2350 Pa |
| Vapour pressure at 50 °C: | 12381,01 Pa (12,38 kPa) |
| Evaporation rate at 20 °C: | Not relevant * |

Product description:

| | |
|-------------------------------|--------------------------|
| Density at 20 °C: | 1077,3 kg/m ³ |
| Relative density at 20 °C: | 1,077 |
| Dynamic viscosity at 20 °C: | 2,27 cP |
| Kinematic viscosity at 20 °C: | 2,1 mm ² /s |
| Kinematic viscosity at 40 °C: | Not relevant * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

| | |
|--|----------------|
| Concentration: | Not relevant * |
| pH: | 6 - 8 |
| Vapour density at 20 °C: | Not relevant * |
| Partition coefficient n-octanol/water 20 °C: | Not relevant * |
| Solubility in water at 20 °C: | Not relevant * |
| Solubility properties: | Not relevant * |
| Decomposition temperature: | Not relevant * |
| Melting point/freezing point: | Not relevant * |

Flammability:

| | |
|----------------------------|------------------------|
| Flash Point: | Non Flammable (>60 °C) |
| Flammability (solid, gas): | Not relevant * |
| Autoignition temperature: | Not relevant * |
| Lower flammability limit: | Not relevant * |
| Upper flammability limit: | Not relevant * |

Particle characteristics:

| | |
|-----------------------------|----------------|
| Median equivalent diameter: | Non-applicable |
|-----------------------------|----------------|

9.2 Other information:

Information with regard to physical hazard classes:

| | |
|--|----------------|
| Explosive properties: | Not relevant * |
| Oxidising properties: | Not relevant * |
| Corrosive to metals: | Not relevant * |
| Heat of combustion: | Not relevant * |
| Aerosols-total percentage (by mass) of flammable components: | Not relevant * |

Other safety characteristics:

| | |
|---------------------------|----------------|
| Surface tension at 20 °C: | Not relevant * |
| Refraction index: | Not relevant * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|----------------|----------------|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

10.6 Hazardous decomposition products:

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SECTION 10: STABILITY AND REACTIVITY (continued)

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Can be fatal if consumed. For more information see section 2.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.
IARC: acrylamide (2A)
- Mutagenicity: Exposure to this product can cause genetic modifications. For more specific information on the possible health effects see section 2.
- Reproductive toxicity: Suspected of damaging fertility or the unborn child

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Serious health effects in the case of prolonged consumption, including death, serious functional disorders or morphological changes of toxicological importance.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Product-specific toxicological information:

| Acute toxicity | | Genus |
|----------------|------------|-------|
| LD50 oral | 124 mg/kg | Rat |
| LD50 dermal | 1141 mg/kg | Rat |

Specific toxicology information on the substances:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

| Identification | Acute toxicity | | Genus |
|--|-----------------|----------------|--------|
| | LD50 oral | LD50 dermal | |
| acrylamide CAS: 79-06-1 EC: 201-173-7 | LD50 oral | 124 mg/kg | Rat |
| | LD50 dermal | 1100 mg/kg | Rat |
| | LC50 inhalation | 11 mg/L (ATEi) | |
| N,N'-methyleneacrylamide CAS: 110-26-9 EC: 203-750-9 | LD50 oral | 100 mg/kg | Rat |
| | LD50 dermal | 1141 mg/kg | Rabbit |
| | LC50 inhalation | 11 mg/L (ATEi) | |

Acute Toxicity Estimate (ATE mix):

| ATE mix | | Ingredient(s) of unknown toxicity |
|------------|---------------------------------------|-----------------------------------|
| Inhalation | 22,73 mg/L (4 h) (Calculation method) | 0 % |

11.2 Information on other hazards:
Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Toxicity:
Acute toxicity:

| Identification | Concentration | | Species | Genus |
|---|---------------|-----------------|---------------------|------------|
| | LC50 | EC50 | | |
| acrylamide CAS: 79-06-1 EC: 201-173-7 | LC50 | 90 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 160 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | Not relevant | | |

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:
Substance-specific information:

| Identification | Bioaccumulation potential | |
|---|---------------------------|---------|
| | BCF | Pow Log |
| acrylamide CAS: 79-06-1 EC: 201-173-7 | BCF | 2 |
| | Pow Log | -0.67 |
| | Potential | Low |

12.4 Mobility in soil:

| Identification | Absorption/desorption | | Volatility | |
|---|-----------------------|-------------------------|------------|---------------------------------|
| | Koc | Conclusion | Henry | Volatility |
| acrylamide CAS: 79-06-1 EC: 201-173-7 | Koc | 10 | Henry | 1,824E-4 Pa·m ³ /mol |
| | Conclusion | Very High | Dry soil | No |
| | Surface tension | 9,04E-3 N/m (138,55 °C) | Moist soil | No |

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|------|---|--|
| | It is not possible to assign a specific code, as it depends on the intended use by the user | Hazardous |

Type of waste (Regulation (EU) No 1357/2014):

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP7 Carcinogenic, HP10 Toxic for reproduction, HP11 Mutagenic, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:



- 14.1 UN number or ID number:** UN2810
- 14.2 UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (acrylamide)
- 14.3 Transport hazard class(es):** 6.1
Labels: 6.1
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
Special regulations: 274, 614
Tunnel restriction code: E
Physico-Chemical properties: see section 9
Limited quantities: 5 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:



- 14.1 UN number or ID number:** UN2810
- 14.2 UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (acrylamide)
- 14.3 Transport hazard class(es):** 6.1
Labels: 6.1
- 14.4 Packing group:** III
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**
Special regulations: 274, 223
EmS Codes: F-A, S-A
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Segregation group: Not relevant
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

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MB045 - Acrylamide/bis-Acrylamide (29:1 solution)

Date of compilation: 06/01/2020

Revised: 01/04/2024

Version: 3 (Replaced 2)

SECTION 14: TRANSPORT INFORMATION (continued)



| | |
|--|--|
| 14.1 UN number or ID number: | UN2810 |
| 14.2 UN proper shipping name: | TOXIC LIQUID, ORGANIC, N.O.S. (acrylamide) |
| 14.3 Transport hazard class(es): | 6.1 |
| Labels: | 6.1 |
| 14.4 Packing group: | III |
| 14.5 Environmental hazards: | No |
| 14.6 Special precautions for user | |
| Physico-Chemical properties: | see section 9 |
| 14.7 Maritime transport in bulk according to IMO instruments: | Not relevant |
| NOTE: ID8000 Consumer Commodity | |

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): *acrylamide (79-06-1)*
- Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Not relevant

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ...):

Product classified hazardous under the CMR. Sale and distribution to the general public is prohibited. Due to its CMR category, it is essential to apply the specific measures for workplace hazard prevention covered in articles 4 and 5 of the 2004/37/EC Directive and later modifications.

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMMISSION REGULATION (EU) 2020/878

Texts of the legislative phrases mentioned in section 2:

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MB045 - Acrylamide/bis-Acrylamide (29:1 solution)

Date of compilation: 06/01/2020

Revised: 01/04/2024

Version: 3 (Replaced 2)

SECTION 16: OTHER INFORMATION (continued)

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H340: May cause genetic defects.
H350: May cause cancer.
H372: Causes damage to organs through prolonged or repeated exposure.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure (Oral).
H312: Harmful in contact with skin.
H301: Toxic if swallowed.
H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 3: H301 - Toxic if swallowed.
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.
Carc. 1B: H350 - May cause cancer.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Muta. 1B: H340 - May cause genetic defects.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Repr. 2: H361f - Suspected of damaging fertility.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure. (Oral).

Classification procedure:

Skin Irrit. 2: Calculation method
Skin Sens. 1: Calculation method
Muta. 1B: Calculation method
Carc. 1B: Calculation method
STOT RE 1: Calculation method
Repr. 2: Calculation method
STOT RE 2: Calculation method
Acute Tox. 4: Calculation method
Acute Tox. 3: Calculation method
Eye Irrit. 2: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -