

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: **7871**
Version: **2.0 en**
Replaces version of: 2015-11-18
Version: (1)

date of compilation: 2015-11-18
Revision: 2019-09-12

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

1.1 Product identifier

Identification of the substance	Acrylamide
Article number	7871
Registration number (REACH)	01-2119463260-48-xxxx
Index No	616-003-00-0
EC number	201-173-7
CAS number	79-06-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: laboratory chemical
laboratory and analytical use

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet : Department Health, Safety and Environment

e-mail (competent person) : sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Centre Beaumont Hospital	Beaumont Road	Dublin 9	01 809 2166	https://www.poisons.ie/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Classification acc. to GHS			
Section	Hazard class	Hazard class and category	Hazard statement
3.1O	acute toxicity (oral)	(Acute Tox. 3)	H301
3.1D	acute toxicity (dermal)	(Acute Tox. 4)	H312

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

Classification acc. to GHS			
Section	Hazard class	Hazard class and category	Hazard statement
3.1I	acute toxicity (inhal.)	(Acute Tox. 4)	H332
3.2	skin corrosion/irritation	(Skin Irrit. 2)	H315
3.3	serious eye damage/eye irritation	(Eye Irrit. 2)	H319
3.4S	skin sensitisation	(Skin Sens. 1)	H317
3.5	germ cell mutagenicity	(Muta. 1B)	H340
3.6	carcinogenicity	(Carc. 1B)	H350
3.7	reproductive toxicity	(Repr. 2)	H361f
3.9	specific target organ toxicity - repeated exposure	(STOT RE 1)	H372

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word

Danger

Pictograms

GHS06, GHS08



Hazard statements

H301 Toxic if swallowed
H312+H332 Harmful in contact with skin or if inhaled
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
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 statements

Precautionary statements - prevention

P201 Obtain special instructions before use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.

For professional users only

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

Labelling of packages where the contents do not exceed 125 ml

Signal word: **Danger**

Symbol(s)



H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P308+P313	IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Acrylamide
Index No	616-003-00-0
Registration number (REACH)	01-2119463260-48-xxxx
EC number	201-173-7
CAS number	79-06-1
Molecular formula	C ₃ H ₅ NO
Molar mass	71,08 g/mol

Substance of Very High Concern (SVHC)

Name of substance	CAS No	Wt%	Listed in	Remarks
Acrylamide	79-06-1	100	Candidate list	Carc. A57a Muta. A57b

Legend

candidate list	Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV
Carc. A57a	Carcinogenic (article 57a)
Muta. A57b	Mutagenic (article 57b)

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In case of skin reactions, consult a physician. In case of skin irritation, consult a physician.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth immediately and drink plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions (such as skin rashes, hives, asthma or anaphylactic shock), Irritation, Loss of righting reflex, and ataxia, Poisoning effect on central nervous system can cause convulsions, laboured breathing and loss of consciousness

4.3 Indication of any immediate medical attention and special treatment needed

Give sodium sulfate as laxative (1 tablespoon in 1 glass of water).

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings
water spray, foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Use extractor hood (laboratory). Clear contaminated areas thoroughly. Avoid exposure. Avoid dust formation. Avoid: Aerosol or mist formation.

• Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

Advice on general occupational hygiene

When using do not eat or drink. Thorough skin-cleansing after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep container tightly closed. Protect against: direct light irradiation.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Store locked up.

• Ventilation requirements

Use local and general ventilation.

• Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C.

7.3 Specific end use(s)

No information available.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [mg/m ³]	STEL [mg/m ³]	Source
EU	acrylamide	79-06-1		IOELV	0,1		2017/2398/EU
IE	dusts non-specific		i	OELV	10		S.I. No. 619 of 2001
IE	dusts non-specific		r	OELV	4		S.I. No. 619 of 2001
IE	acrylamide	79-06-1		OELV	0,03		S.I. No. 619 of 2001

Notation

i Inhalable fraction

r Respirable fraction

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs/DMELs/PNECs and other threshold levels

• human health values

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	0,1 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
DNEL	0,07 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	120 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
DNEL	120 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
DNEL	3 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects

• environmental values

Endpoint	Threshold level	Environmental compartment	Exposure time
PNEC	0,032 mg/l	freshwater	short-term (single instance)
PNEC	2 µg/l	marine water	short-term (single instance)
PNEC	0,2 mg/l	sewage treatment plant (STP)	short-term (single instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

• material thickness

0,3 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P3 (filters at least 99,95 % of airborne particles, colour code: White). Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	solid (crystalline)
Colour	white
Odour	odourless
Odour threshold	No data available

Other physical and chemical parameters

pH (value)	5 – 7 (water: 50 g/l, 20 °C)
Melting point/freezing point	84,5 °C

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: **7871**

Initial boiling point and boiling range	232 °C at 1.013 hPa
Flash point	138 °C
Evaporation rate	no data available
Flammability (solid, gas)	These information are not available
<u>Explosive limits</u>	
• lower explosion limit (LEL)	this information is not available
• upper explosion limit (UEL)	this information is not available
Explosion limits of dust clouds	these information are not available
Vapour pressure	0,9 Pa at 25 °C
Density	1,13 g/cm ³ at 20 °C
Vapour density	2,45 (air = 1)
Bulk density	~ 500 kg/m ³
Relative density	Information on this property is not available.
<u>Solubility(ies)</u>	
Water solubility	2.155 g/l at 30 °C
<u>Partition coefficient</u>	
n-octanol/water (log KOW)	-0,9 (pH value: ~7, 20 °C) (ECHA)
Auto-ignition temperature	424 °C
Decomposition temperature	>175 °C
Viscosity	not relevant (solid matter)
Explosive properties	Shall not be classified as explosive
Oxidising properties	none
9.2 Other information	
Temperature class (EU, acc. to ATEX)	T2 (Maximum permissible surface temperature on the equipment: 300°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance: If heated => Polymerisation. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion. In case of warming: Vapours can form explosive mixtures with air.

10.2 Chemical stability

Can polymerise exothermically if heated, exposed to air, sunlight or by addition of free radical initiators.

10.3 Possibility of hazardous reactions

Violent reaction with: Peroxides, Sulphuric acid, Alkalines,
Polymerisation: Oxidisers, Heat, Direct light irradiation

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

10.4 Conditions to avoid

Keep away from heat. - Decomposition takes place from temperatures above: $>175\text{ }^{\circ}\text{C}$. - UV-radiation/sunlight. - Direct light irradiation.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Peroxides. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Exposure route	Endpoint	Value	Species	Source
oral	LD50	354 mg/kg	rat	ECHA
dermal	LD50	1.141 mg/kg	rabbit	ECHA

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction. May cause sensitization by skin contact.

Summary of evaluation of the CMR properties

Germ cell mutagenicity:

May cause genetic defects

Carcinogenicity:

May cause cancer

Reproductive toxicity:

Suspected of damaging fertility

• Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

• Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

data are not available

• If in eyes

Irritating to eyes

• If inhaled

causes slight to moderate irritation

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

• If on skin

causes skin irritation

Other information

Other adverse effects: Liver and kidney damage, Loss of righting reflex, and ataxia, Allergic reactions (such as skin rashes, hives, asthma or anaphylactic shock), Poisoning effect on central nervous system can cause convulsions, laboured breathing and loss of consciousness

SECTION 12: Ecological information

12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
EC50	98 mg/l	aquatic invertebrates	ECHA	48 h

Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
NOEC	5.000 $\mu\text{g/l}$	fish	ECHA	28 d
NOEC	2,04 mg/l	aquatic invertebrates	ECHA	28 d

12.2 Process of degradability

The substance is readily biodegradable.

Theoretical Oxygen Demand with nitrification: 2,138 mg/mg

Theoretical Oxygen Demand: 1,351 mg/mg

Theoretical Carbon Dioxide: 1,857 mg/mg

Process	Degradation rate	Time
biotic/abiotic	100 %	28 d
oxygen depletion	7,4 %	5 d

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)

-0,9 (pH value: ~7, 20 °C)

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.


13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN number	2074
14.2	UN proper shipping name	ACRYLAMIDE, SOLID
	Hazardous ingredients	Acrylamide
14.3	Transport hazard class(es)	
	Class	6.1 (toxic substances)
14.4	Packing group	III (substance presenting low danger)
14.5	Environmental hazards	none (non-environmentally hazardous acc. to the dangerous goods regulations)
14.6	Special precautions for user	
	Provisions for dangerous goods (ADR) should be complied within the premises.	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	
	The cargo is not intended to be carried in bulk.	
14.8	Information for each of the UN Model Regulations	
	• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)	
	UN number	2074

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: **7871**

Proper shipping name	ACRYLAMIDE, SOLID
Particulars in the transport document	UN2074, ACRYLAMIDE, SOLID, 6.1, III, (E)
Class	6.1
Classification code	T2
Packing group	III
Danger label(s)	6.1



Special provisions (SP)	802(ADN)
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	60

• International Maritime Dangerous Goods Code (IMDG)

UN number	2074
Proper shipping name	ACRYLAMIDE, SOLID
Particulars in the shipper's declaration	UN2074, ACRYLAMIDE, SOLID, 6.1, III
Class	6.1
Marine pollutant	-
Packing group	III
Danger label(s)	6.1



Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-A
Stowage category	A

• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	2074
Proper shipping name	Acrylamide, solid
Particulars in the shipper's declaration	UN2074, Acrylamide, solid, 6.1, III
Class	6.1
Packing group	III
Danger label(s)	6.1

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: 7871



Excepted quantities (EQ)

E1

Limited quantities (LQ)

10 kg

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

- **Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**

Not listed.

- **Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**

Not listed.

- **Regulation 850/2004/EC on persistent organic pollutants (POP)**

Not listed.

- **Restrictions according to REACH, Annex XVII**

Name of substance	CAS No	Wt%	Type of registration	Conditions of restriction	No
Acrylamide	79-06-1	100	1907/2006/EC annex XVII	R60	60
Acrylamide		100	1907/2006/EC annex XVII	R28-30	28
Acrylamide		100	1907/2006/EC annex XVII	R28-30	29

Legend

R28-30

1. Shall not be placed on the market, or used,
- as substances,
- as constituents of other substances, or,
- in mixtures,
for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:
- either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,
- the relevant concentration specified in Directive 1999/45/EC where no specific concentration limit is set out in Part 3 of Annex VI to Regulation (EC) No 1272/2008.

Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:
'Restricted to professional users'.

2. By way of derogation, paragraph 1 shall not apply to:

(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;

(b) cosmetic products as defined by Directive 76/768/EEC;

(c) the following fuels and oil products:

- motor fuels which are covered by Directive 98/70/EC,

- mineral oil products intended for use as fuel in mobile or fixed combustion plants,

- fuels sold in closed systems (e.g. liquid gas bottles);

(d) artists' paints covered by Directive 1999/45/EC;

(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2.

Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.

R60

Shall not be placed on the market or used as a substance or constituent of mixtures in a concentration, equal to or greater than 0,1 % by weight for grouting applications after 5 November 2012.

- **Restrictions according to REACH, Title VIII**

None.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide ≥98 %, 2x crystalline, extra pure

article number: **7871**

• List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Substance of Very High Concern (SVHC)			
Name acc. to inventory	CAS No	Listed in	Remarks
acrylamide	79-06-1	Candidate list	Carc. A57a Muta. A57b

Legend

candidate list Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV
Carc. A57a Carcinogenic (article 57a)
Muta. A57b Mutagenic (article 57b)

• Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

• Directive 75/324/EEC relating to aerosol dispensers

Filling batch

Deco-Paint Directive (2004/42/EC)

VOC content	100 % 1.130 g/l
-------------	--------------------

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

not listed

Regulation 98/2013/EU on the marketing and use of explosives precursors

not listed

Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

not listed

National inventories

Substance is listed in the following national inventories:

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: **7871**

Country	National inventories	Status
AU	AICS	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

16.1 Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.1	Remarks: For full text of Hazard- and EU Hazard-statements: see SECTION 16.		yes
2.2		Pictograms: change in the listing (table)	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
8.1	Occupational exposure limit values (Workplace Exposure Limits): not relevant	Occupational exposure limit values (Workplace Exposure Limits)	yes

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide ≥98 %, 2x crystalline, extra pure

article number: 7871

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		• human health values: change in the listing (table)	yes
8.1		• environmental values: change in the listing (table)	yes
14.3	Transport hazard class(es)	Transport hazard class(es): class 6.1 hazard - toxic substances	yes
14.8	Particulars in the transport document: UN2074, ACRYLAMIDE, SOLID, (acrylamide), 6.1, III, (E)	Particulars in the transport document: UN2074, ACRYLAMIDE, SOLID, 6.1, III, (E)	yes
14.8	Particulars in the shipper's declaration: UN2074, ACRYLAMIDE, SOLID, (acrylamide), 6.1, III	Particulars in the shipper's declaration: UN2074, ACRYLAMIDE, SOLID, 6.1, III	yes
14.8		Marine pollutant: -	yes
14.8	Special provisions (SP): -		yes
14.8	Excepted quantities (EQ): E0	Excepted quantities (EQ): E1	yes
14.8		• International Civil Aviation Organization (ICAO-IATA/DGR)	yes
14.8		UN number: 2074	yes
14.8		Proper shipping name: Acrylamide, solid	yes
14.8		Particulars in the shipper's declaration: UN2074, Acrylamide, solid, 6.1, III	yes
14.8		Class: 6.1	yes
14.8		Packing group: III	yes
14.8		Danger label(s): 6.1	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Excepted quantities (EQ): E1	yes
14.8		Limited quantities (LQ): 10 kg	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2017/2398/EU	Directive of the European Parliament and of the Council amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: **7871**

Abbr.	Descriptions of used abbreviations
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Carc.	carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	indicative occupational exposure limit value
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Muta.	germ cell mutagenicity
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
S.I. No. 619 of 2001	Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001
STEL	short-term exposure limit
SVHC	Substance of Very High Concern
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Acrylamide $\geq 98\%$, 2x crystalline, extra pure

article number: **7871**

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H301	toxic if swallowed
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 prolonged or repeated exposure

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.