

SAFETY DATA SHEET (SDS)

in accordance with Regulation (EC) No 1907/2006 (REACH), Annex II — Regulation (EU) 2020/878

Date: 16.07.2026 | Version: 8 | EN

Akrylamid

prop-2-enamide

CAS 79-06-1

C_3H_5NO

EC 201-173-7



MOLAR MASS
71.08

LOGP
-0.7

HAZARD CLASSIFICATION (GHS / CLP)



Danger

H350 H340 H361f H332 H312 H301 H372 H315 H319 H317

1. Identification of the substance/mixture and of the company/undertaking

1.1 Substance name	Akrylamid
1.1 IUPAC name	prop-2-enamide
1.1 CAS number	79-06-1
1.1 EC number	201-173-7
1.1 PubChem CID	6579
1.1 InChIKey	HRPVXLWXLXDGHG-UHFFFAOYSA-N
1.1 SMILES	<chem>C=CC(=O)N</chem>
1.1 Molecular formula	C_3H_5NO ^[7]
1.1 Molar mass	71.08 g/mol ^[7]
1.1 Exact mass	—

1.2 Uses

For laboratory and research purposes. Not for use in the production of food, medicines or cosmetics without appropriate authorisation.

1.3 Details of the supplier

Supplier details have not been configured (MOL-GOD → Label generator → Producer details).

1.4 Emergency telephone number

Emergency telephone +48 42 657 99 00

Toxicological Information Centre (CIT), Łódź — available 24/7

2. Hazards identification

GHS:



PPE:



Prohibitions:



Danger

Hazard statements (H) ^{[3][4][9]}

H350	May cause cancer
H340	May cause genetic defects
H361f	Suspected of damaging fertility
H332	Harmful if inhaled
H312	Harmful in contact with skin
H301	Toxic if swallowed
H372	Causes damage to organs through prolonged or repeated exposure
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction

Precautionary statements (P) ^{[3][4][9]}

P201	Obtain special instructions before use
P203	Obtain, read and follow all safety instructions before use
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with plenty of 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
P311	Call a POISON CENTER or doctor/physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P314	Get medical advice/attention if you feel unwell
P330	Rinse mouth
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or rash occurs: Get medical advice/attention

P337+P313

If eye irritation persists: Get medical advice/attention

P405

Store locked up

P501

Dispose of contents/container to an approved waste collection point

NOTE: CMR substance — employment of pregnant and breastfeeding women in work harmful to health is prohibited (Polish Labour Code Art. 176 § 1; Council of Ministers Regulation of 3 April 2017, Journal of Laws 2017 item 796). ^{[16][17]}

3. Composition/information on ingredients

Substance type	pure substance
CAS Number	79-06-1
EC number	201-173-7
Molecular formula	C ₃ H ₅ NO
Concentration	≥99% (typical reagent-grade purity — to be confirmed by the supplier's specification)

4. First aid measures



Inhalation

Move the affected person to fresh air. Keep at rest. If not breathing: artificial respiration (qualified personnel only). ^{[1][2][14]}

Skin contact

Remove contaminated clothing. Rinse skin with soap and water (min. 15 minutes). Call a physician immediately. ^{[1][2][14]}

Eye contact

Rinse eyes with running water (min. 15 minutes). Remove contact lenses if possible. If irritation persists — consult an ophthalmologist. ^{[1][2][14]}

Ingestion

Do NOT induce vomiting (unless directed by a physician). Rinse mouth with water. Never give anything by mouth to an unconscious person. Poison Centre Łódź: +48 42 657 99 00 (24/7). Emergency number: 112. ^{[1][2][14]}

Symptoms and effects

nausea, vomiting, diarrhoea; cough, shortness of breath, headache, dizziness; skin redness and irritation; eye irritation and watering. ^{[3][9]}

Notes for physician

Symptomatic treatment. No specific antidote. ^{[1][2][14]}

Emergency numbers: CIT Łódź: +48 42 657 99 00 (24/7) | Emergency: 112

5. Firefighting measures

Suitable extinguishing media	Adapt extinguishing media to surroundings. CO ₂ , dry powder, foam. ^{[1][2][14]}
Unsuitable extinguishing media	No specific restrictions. ^{[1][2][14]}
Specific hazards	Thermal decomposition products: CO, CO ₂ , NO _x . ^[15]
Advice for firefighters	Use self-contained breathing apparatus (SCBA). Full protective suit. ^{[1][2][14]}
Flash Point	137.8°C ^[8]

6. Accidental release measures

Personal precautions	Use personal protective equipment (see Section 8). Avoid breathing dust. ^{[1][2][14]}
Environmental precautions	Prevent entry into sewers, groundwater and surface water. ^{[1][2][14]}
Methods for containment and cleaning up	Collect mechanically into suitable containers. Absorption: sand, vermiculite, diatomaceous earth. Do not sweep dry (dust formation). ^{[1][2][14]}
Related sections	8; 13

7. Handling and storage

Precautions	Work in a fume hood or with adequate ventilation. No eating, drinking or smoking in the work area. ^{[1][2][14]}
Storage temperature	Store at room temperature (15-25°C) or as indicated on the label. ^{[1][2][14]}
Humidity	Store in a dry place (<60% RH). ^{[1][2][14]}
Light	Protect from direct sunlight. ^{[1][2][14]}
Incompatible materials	Strong oxidizers. ^[15]

8. Exposure controls/personal protection

8.1 Control parameters

OEL — NDS (Poland)	No NDS (OEL) value in the available working list — verify in the current MRPiPS regulation before use; do not assume the absence of a limit value.
OEL (EU)	OEL-TWA: 0.1 mg/m ³ — BOELV CMD 2004/37 (2017/2398) — “skin” notation ^[10]
DNEL	No data available.
PNEC	No data available.

8.2 Personal protective equipment (PPE) ^{[5][6][18]}

 Chemical-resistant protective gloves EN ISO 374-1:2016+A1:2018 nitrile (min. 0.11 mm)	 Closed safety spectacles or goggles EN ISO 16321-1:2022 / EN 166:2001	 Respiratory protection EN 14387:2004+A1:2008 type A2 filter (organic vapours)	 Chemical-resistant protective clothing EN 13034:2005+A1:2009 (typ 6) / EN 14126:2003 (bio)	 Closed safety footwear with toe protection EN ISO 20345:2022 (S2/S3)
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9. Physical and chemical properties

Property (item 9.1)	Value	Source
Physical state	Solid	
Colour	No data available.	

Property (item 9.1)	Value	Source
Odour	No data available.	
pH (1% aqueous solution)	No data available.	
Melting point	84.5°C [8]	
Boiling point	192.6°C [8]	
Flash point	137.8°C [8]	
Flammability	No data available.	
Lower and upper explosion limit	Not applicable	
Density (20°C)	1.122 g/cm ³ [8]	
Vapour pressure	No data available.	
Relative vapour density	Not applicable	
Kinematic viscosity	Not applicable	
Decomposition temperature	Not applicable	
Water solubility (20°C)	2040 g/L, 25°C [8]	
Particle characteristics	No data available.	
Partition coefficient n-octanol/water (log value)	-0.7 [8]	
TPSA	43.1 Å ² [7]	
HBD / HBA	No data available. / No data available.	
Rotatable bonds	No data available.	
Molar mass	71.08 g/mol [7]	
Molecular formula	C ₃ H ₅ NO [7]	

10. Stability and reactivity

Reactivity	Reactive monomer — may undergo hazardous polymerisation (see below). [15]
Chemical stability	Monomer capable of exothermic autopolymerisation; requires an inhibitor (stabiliser). Depletion of the inhibitor, heating or contamination may initiate violent polymerisation. [15]
Hazardous reactions	Hazardous polymerisation: a violent, exothermic polymerisation reaction is possible, with a pressure rise and a risk of container rupture. Initiated by heat, light, peroxides, oxidisers or loss of the inhibitor. [15]
Conditions to avoid	Heating, UV light, loss of the inhibitor, contact with oxidisers/peroxides/radical initiators. [15]
Incompatible materials	Strong oxidizers. [15]
Decomposition products	Thermal decomposition products: CO, CO ₂ , NO _x . [15]

11. Toxicological information

LD50 (oral)	LD50 124 mg/kg (szczur, doustnie) [PubChem]
LD50 (dermal)	No data available.
LC50 (inhalation)	No data available.
Skin irritation	Category 2 — skin irritation. [3][9]

Eye irritation	Category 2 — eye irritation. [3][9]
Sensitisation	Skin, Category 1 (H317): May cause an allergic skin reaction. [3][9]
Mutagenicity	Category 1A/1B (CLP). [3][9]
Carcinogenicity	Category 1A/1B (CLP). [3][9]
IARC classification (carcinogenicity)	IARC Group 2A — probably carcinogenic to humans. [local snapshot — not verified against the current IARC list]
Reproductive toxicity	Category 2 (CLP). [3][9]
STOT — single exposure	Not classified (no harmonised classification in CLP Annex VI) [3][9]
STOT — repeated exposure	Category 1 (H372): Causes damage to organs through prolonged or repeated exposure. [3][9]
Aspiration hazard	Not classified (no harmonised classification in CLP Annex VI) [3][9]

12. Ecological information

Aquatic toxicity	No data available.
Persistence / biodegradability	No data available.
Bioaccumulative potential	log Kow = -0.7 [8] . Low bioaccumulation potential (log Kow < 4.5 — PBT/vPvB screening criterion per ECHA Guidance R.11). [19][20]
Mobility in soil	No data available.
PBT/vPvB assessment	Insufficient data to assess PBT/vPvB.
Endocrine disrupting properties	No information.

13. Disposal considerations

Disposal method	Hand over for disposal to licensed contractors in accordance with national and local regulations. Do not discharge into sewers.
Waste code (EWC)	16 05 06* — Laboratory and analytical chemicals (e.g. chemical reagents) containing hazardous substances. Verification of the EWC code required. [13]
Packaging	Cleaned packaging may be recycled. Contaminated packaging must be treated as hazardous waste.

14. Transport information



Class 6.1 — Toxic substances

UN number	UN 2074 [12]
Proper shipping name	ACRYLAMIDE, SOLID [12]
Transport hazard class	6.1 — Toxic substances [12]
Packing Group	III [12]
Environmental hazard	Not classified as environmentally hazardous for transport (no H400/H410/H411 in CLP Annex VI; no marine pollutant mark required) [3]
Special precautions	Handle as dangerous goods according to the assigned class (ADR/IMDG/IATA); apply the precautions appropriate to that class.
CN/HS code	CN/HS code: verification required in the Eurostat Combined Nomenclature.
Notes	Dangerous goods ADR/IMDG/IATA. Carcinogenic/mutagenic — see Sections 2 and 11.
Environmentally hazardous (mark: fish and tree)	No

15. Regulatory information

SVHC status	Listed on the SVHC Candidate List (REACH Art. 59) — verified against the ECHA Candidate List. ^{[1][11]}
REACH Annex XIV	Not verified against the ECHA Authorisation List — check REACH Annex XIV. ^[1]
REACH Annex XVII	Subject to REACH restriction Annex XVII (entry60): Acrylamide — restriction on placing on the market and use for injection/grouting applications at a concentration $\geq 0.1\%$ by weight (entry 60 REACH Annex XVII; Regulation (EU) 366/2011). Furthermore: Subject to general entries 28–30 of REACH Annex XVII (CMR substance cat. 1A/1B): sale to the general public prohibited — supply to professional users only. ^[1]
Verification date	2026-07-16

16. Other information

Legal status of the harmonised classification: CLP — Regulation (EC) No 1272/2008, Annex VI (current ECHA harmonised inventory, as at the issue date of this sheet). Entries entering into force after 16.07.2026 were omitted as future (not yet applicable).

Data aggregated automatically from public reference databases (PubChem, ECHA, NIST and others).

Full text of H statements

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Full text of P statements

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P311	Call a POISON CENTER or doctor/physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell

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P332+P313	If skin irritation occurs: Get medical advice/attention
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P337+P313	If eye irritation persists: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container to an approved waste collection point

Abbreviations

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging (Reg. (EC) 1272/2008)
CMR	Carcinogenic, Mutagenic, toxic to Reproduction
DNEL	Derived No-Effect Level
EC	European Community number
EPI	Personal protective equipment
GHS	Globally Harmonized System
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
SDS	Safety Data Sheet
LC50	Lethal Concentration, 50%
LD50	Lethal Dose, 50%
NDS	Maximum admissible concentration (workplace, PL)
NDSch	Short-term exposure limit (PL)
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Reg. (EC) 1907/2006)
STOT	Specific Target Organ Toxicity
SVHC	Substance of Very High Concern
TPSA	Topological Polar Surface Area
vPvB	very Persistent and very Bioaccumulative

Version history

v8 (16.07.2026)	Prepared on the basis of the ECHA harmonised classification (Annex VI to CLP, ATP 23).
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References

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- [2] European Commission. Reg.(EU) 2020/878 — amending Annex II REACH. OJ EU L 203/2020. From 01.01.2023. URL: <https://eur-lex.europa.eu/eli/reg/2020/878/oj> Accessed: 2026-07-16.
- [3] EP and Council. Reg.(EC) 1272/2008 (CLP) + ATP 23. OJ EU L 353/2008. URL: <https://eur-lex.europa.eu/eli/reg/2008/1272/oj> Accessed: 2026-07-16.
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- [5] ISO. ISO 7010:2019 — Graphical symbols. Safety signs. URL: <https://www.iso.org/standard/72424.html> Accessed: 2026-07-16.
- [6] ISO. ISO 3864-1:2011 — Safety colours and safety signs. URL: <https://www.iso.org/standard/51021.html> Accessed: 2026-07-16.
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- [12] UNECE. European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), 2025 edition (ECE/TRANS/352). Geneva: United Nations. URL: <https://unece.org/adr> Accessed: 2026-07-16.
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- [21] MRIPS Regulation of 12.06.2018 — NDS/NDN. Journal of Laws 2024 item 1017. URL: <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20240001017> Accessed: 2026-07-16.

External links

NIST: <https://webbook.nist.gov/cgi/cbook.cgi?ID=79-06-1>

ChEMBL: https://www.ebi.ac.uk/chembl/compound_report_card/CHEMBL348107

NFPA 704 (supplementary information — NFPA/USA system; not a required element of an EU safety data sheet under REACH Annex II)



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Generator: Document compiled automatically on the basis of the ECHA harmonised classification (Annex VI to CLP) and public physicochemical databases.

Author: www.MolGod.org — platform for automated safety data sheets (SDS).

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