

## SAFETY DATA SHEET (SDS)

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

Date: 22.09.2026 | Version: 1 | EN

## acetamid

acetamide

MOLAR MASS

59.07

LOGP

-0.9

CAS 60-35-5

C<sub>2</sub>H<sub>5</sub>NO

EC 200-473-5

## HAZARD CLASSIFICATION (GHS / CLP)



## Warning

H351

Hazard class scope limited to the harmonised classification (CLP Annex VI); classes outside the harmonised entry may require supplier self-classification (CLP Art. 4(3)) — verify with the supplier safety data sheet.

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

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| 1.1 Substance name    | acetamid                                        |
| 1.1 IUPAC name        | acetamide                                       |
| 1.1 CAS number        | 60-35-5                                         |
| 1.1 EC number         | 200-473-5                                       |
| 1.1 PubChem CID       | 178                                             |
| 1.1 InChIKey          | DLFVBJFMPXGRIB-UHFFFAOYSA-N                     |
| 1.1 SMILES            | CC(=O)N                                         |
| 1.1 Molecular formula | C <sub>2</sub> H <sub>5</sub> NO <sup>[7]</sup> |
| 1.1 Molar mass        | 59.07 g/mol <sup>[7]</sup>                      |
| 1.1 Exact mass        | 59.0371 Da <sup>[7]</sup>                       |

## 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

REFERENCE COPY — NO  
SUPPLIER DETAILS — NOT FOR  
DISTRIBUTION

Supplier details are not included in this reference copy. The supplier placing the substance on the market must complete this section and remains responsible for the sheet under REACH. MolGod.org prepares documentation and is not the supplier of this substance.

## 1.4 Emergency telephone number

Emergency telephone +48 42 631 47 24

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

## 2. Hazards identification

GHS:



PPE:



**Warning**

### Hazard statements (H) <sup>[3][4][10]</sup>

**H351** Suspected of causing cancer

### Precautionary statements (P) <sup>[3][4][10]</sup>

**P201** Obtain special instructions before use  
**P202** Do not handle until all safety precautions have been read and understood  
**P280** Wear protective gloves/protective clothing/eye protection/face protection  
**P308+P313** IF exposed or concerned: 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). <sup>[14][15]</sup>**

Hazard class scope limited to the harmonised classification (CLP Annex VI); classes outside the harmonised entry may require supplier self-classification (CLP Art. 4(3)) — verify with the supplier safety data sheet.

### 3. Composition/information on ingredients

|                   |                                                                                       |
|-------------------|---------------------------------------------------------------------------------------|
| Substance type    | pure substance                                                                        |
| CAS Number        | 60-35-5                                                                               |
| EC number         | 200-473-5                                                                             |
| Molecular formula | C <sub>2</sub> H <sub>5</sub> NO                                                      |
| Concentration     | ≥99% (typical reagent-grade purity — to be confirmed by the supplier's specification) |
| Clp index no      | 616-022-00-4                                                                          |

### 4. First aid measures



#### Inhalation

Move the affected person to fresh air. Keep at rest. If not breathing: artificial respiration (qualified personnel only). [\[1\]](#)[\[2\]](#)[\[12\]](#)

#### Skin contact

Remove contaminated clothing. Rinse skin with soap and water (min. 15 minutes). [\[1\]](#)[\[2\]](#)[\[12\]](#)

#### Eye contact

Rinse eyes with running water (min. 15 minutes). Remove contact lenses if possible. If irritation persists — consult an ophthalmologist. [\[1\]](#)[\[2\]](#)[\[12\]](#)

#### 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 42 631 47 24 (24/7). Emergency number: 112. [\[1\]](#)[\[2\]](#)[\[12\]](#)

#### Symptoms and effects

No specific symptoms described in the literature. [\[3\]](#)[\[10\]](#)

#### Notes for physician

Requires verification

**Emergency numbers: Emergency: 112 (EU-wide).  
Poison centre: as designated in the country of  
placing on the market (CLP Art. 45).**

### 5. Firefighting measures

|                                |                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------|
| Suitable extinguishing media   | Adapt extinguishing media to surroundings. CO <sub>2</sub> , dry powder, foam.               |
| Unsuitable extinguishing media | No specific restrictions.                                                                    |
| Specific hazards               | Thermal decomposition products: CO, CO <sub>2</sub> , NO <sub>x</sub> . <a href="#">[13]</a> |
| Advice for firefighters        | Use self-contained breathing apparatus (SCBA). Full protective suit.                         |

### 6. Accidental release measures

|                                         |                                                                                                                                                                                                   |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions                    | Use personal protective equipment (see Section 8). Avoid breathing dust. <a href="#">[1]</a> <a href="#">[2]</a> <a href="#">[12]</a>                                                             |
| Environmental precautions               | Prevent entry into sewers, groundwater and surface water. <a href="#">[1]</a> <a href="#">[2]</a> <a href="#">[12]</a>                                                                            |
| Methods for containment and cleaning up | Collect mechanically into suitable containers. Absorption: sand, vermiculite, diatomaceous earth. Do not sweep dry (dust formation). <a href="#">[1]</a> <a href="#">[2]</a> <a href="#">[12]</a> |
| 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. <a href="#">[1]</a> <a href="#">[2]</a> <a href="#">[12]</a> |
| Storage temperature | Store at room temperature (15-25°C) or as indicated on the label. <a href="#">[1]</a> <a href="#">[2]</a> <a href="#">[12]</a>                                  |
| Humidity            | Store in a dry place (<60% RH). <a href="#">[1]</a> <a href="#">[2]</a> <a href="#">[12]</a>                                                                    |

|                        |                                                     |
|------------------------|-----------------------------------------------------|
| Light                  | Protect from direct sunlight. <sup>[1][2][12]</sup> |
| Incompatible materials | Strong oxidizers. <sup>[13]</sup>                   |

## 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)           | The EU OEL value has not been verified against the available dataset — check the IOELV/BOELV directives; do not assume the absence of a value.     |
| DNEL               | No data available.                                                                                                                                 |
| PNEC               | No data available.                                                                                                                                 |

### 8.2 Personal protective equipment (PPE) <sup>[5][6][16]</sup>



## 9. Physical and chemical properties

| Property (item 9.1)                           | Value                                                            | Source |
|-----------------------------------------------|------------------------------------------------------------------|--------|
| Physical state                                | Solid                                                            |        |
| Colour                                        | No data available.                                               |        |
| Odour                                         | No data available.                                               |        |
| pH (1% aqueous solution)                      | No data available.                                               |        |
| Melting point                                 | 81.16°C <sup>[8] [7]</sup>                                       |        |
| Boiling point                                 | 221.5288°C <sup>[8] [7]</sup>                                    |        |
| Flash point                                   | Not applicable (REACH 9.1(h))                                    |        |
| Flammability                                  | No data available.                                               |        |
| Lower and upper explosion limit               | Not applicable (REACH 9.1(g))                                    |        |
| Density (20°C)                                | 1.159 g/cm <sup>3</sup> <sup>[7]</sup>                           |        |
| Vapour pressure                               | 0.002 kPa (0.0182 mmHg, 25°C) (experimental data) <sup>[7]</sup> |        |
| Relative vapour density                       | Not applicable (REACH 9.1(q))                                    |        |
| Kinematic viscosity                           | Not applicable (REACH 9.1(l))                                    |        |
| Refractive index n <sub>D</sub> <sup>20</sup> | 1.4274 (experimental data) <sup>[7]</sup>                        |        |
| Auto-ignition temperature                     | No data available.                                               |        |
| Decomposition temperature                     | Not applicable                                                   |        |
| Rozpuszcz. w wodzie                           | 705 g/L, 24.5°C <sup>[7]</sup>                                   |        |

| Property (item 9.1)                                      | Value                                                                                                                                                                | Source |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| <b>Particle characteristics</b>                          | The particle size distribution has not been determined for this commercial form – required under Annex II 9.1(r); to be completed from the supplier's specification. |        |
| <b>Partition coefficient n-octanol/water (log value)</b> | -0.9 <sup>[9]</sup>                                                                                                                                                  |        |
| <b>Molar mass</b>                                        | 59.07 g/mol <sup>[7]</sup>                                                                                                                                           |        |
| <b>Molecular formula</b>                                 | C <sub>2</sub> H <sub>5</sub> NO <sup>[7]</sup>                                                                                                                      |        |
| <b>Lipinski rule (RO5)</b>                               | <b>PASS</b>                                                                                                                                                          |        |

Where a property above reads "No data available", no measured value was found in the public sources consulted for this substance. The property has not been determined by MolGod.org and no value is inferred. "Not applicable" means the property has no meaning for this substance in the form supplied.

## 10. Stability and reactivity

|                               |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| <b>Reactivity</b>             | Stable under normal storage and handling conditions.                    |
| <b>Chemical stability</b>     | Thermally stable under recommended conditions.                          |
| <b>Hazardous reactions</b>    | No hazardous reactions known under normal conditions.                   |
| <b>Conditions to avoid</b>    | High temperatures, direct sunlight, moisture.                           |
| <b>Incompatible materials</b> | Strong oxidizers.                                                       |
| <b>Decomposition products</b> | Thermal decomposition products: CO, CO <sub>2</sub> , NO <sub>x</sub> . |

## 11. Toxicological information

|                                              |                                                                                                                                                             |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LD50 (oral)</b>                           | LD50 7000 mg/kg (rat, oral) <sup>[7]</sup>                                                                                                                  |
| <b>LD50 (dermal)</b>                         | No data available.                                                                                                                                          |
| <b>LC50 (inhalation)</b>                     | LC50 16000 ppm (rat) <sup>[7]</sup>                                                                                                                         |
| <b>Skin irritation</b>                       | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>Eye irritation</b>                        | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>Sensitisation</b>                         | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>Mutagenicity</b>                          | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>Carcinogenicity</b>                       | Category 2 (harmonised classification, Annex VI to CLP).                                                                                                    |
| <b>IARC classification (carcinogenicity)</b> | IARC Group 2B — possibly carcinogenic to humans. [local snapshot — not verified against the current IARC list] <sup>[19]</sup>                              |
| <b>Reproductive toxicity</b>                 | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>STOT — single exposure</b>                | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>STOT — repeated exposure</b>              | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |
| <b>Aspiration hazard</b>                     | Not classified for this hazard (outside the scope of the harmonised classification in CLP Annex VI; verify supplier self-classification) <sup>[3][10]</sup> |

## 12. Ecological information

|                                        |                                                                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Aquatic toxicity</b>                | No data available.                                                                                                                |
| <b>Persistence / biodegradability</b>  | No data available.                                                                                                                |
| <b>Bioaccumulative potential</b>       | log Kow = -0.9 [9]. Low bioaccumulation potential (log Kow < 4.5 — PBT/vPvB screening criterion per ECHA Guidance R.11). [17][18] |
| <b>Mobility in soil</b>                | No data available.                                                                                                                |
| <b>PBT/vPvB assessment</b>             | Insufficient data to assess PBT/vPvB.                                                                                             |
| <b>Endocrine disrupting properties</b> | No information.                                                                                                                   |

## 13. Disposal considerations

|                         |                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal method</b>  | Hand over for disposal to licensed contractors in accordance with national and local regulations. Do not discharge into sewers.                    |
| <b>Waste code (EWC)</b> | 16 05 06* — Laboratory and analytical chemicals (np. chemical reagents) zawierające substancje niebezpieczne. EWC code verification required. [11] |
| <b>Packaging</b>        | Cleaned packaging may be recycled. Contaminated packaging must be treated as hazardous waste.                                                      |

## 14. Transport information

|                             |                                                                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>            | VERIFICATION REQUIRED — no verified UN assignment.                                                                                   |
| <b>Environmental hazard</b> | Not classified as environmentally hazardous for transport (no H400/H410/H411 in CLP Annex VI; no marine pollutant mark required) [3] |
| <b>Special precautions</b>  | Handle as dangerous goods according to the assigned class (ADR/IMDG/IATA); apply the precautions appropriate to that class.          |
| <b>CN/HS code</b>           | CN/HS code: verification required in the Eurostat Combined Nomenclature.                                                             |
| <b>Notes</b>                | Transport classification not verified. Do not assume the absence of restrictions — check ADR/IMDG/IATA before shipping.              |

## 15. Regulatory information

|                                              |                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SVHC status</b>                           | SVHC status not verified against the available dataset — check the current ECHA Candidate List; do not assume absence. [1]                                       |
| <b>REACH Annex XIV</b>                       | Not verified against the ECHA Authorisation List — check REACH Annex XIV. [1]                                                                                    |
| <b>REACH Annex XVII</b>                      | Not confirmed in the available Annex XVII dataset — verify against the current ECHA list before placing on the market; do not assume absence of restriction. [1] |
| <b>IARC classification (carcinogenicity)</b> | IARC Group 2B — possibly carcinogenic to humans.                                                                                                                 |

## 16. Other information

Legal status of classification: harmonised under CLP Annex VI — Reg. (EC) No 1272/2008 (as at the date of issue). Entries with an entry-into-force date after 22.09.2026 were omitted as future (not yet applicable).

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

### Scientific citations (10)

Acetamide 60-35-5. Wiley (2012). DOI: 10.1002/0471701343.sdp25994  
et al.. Coupling nitrate electrochemical reduction and nitrite oxidation of ethanol for acetamide synthesis.. (2025). DOI: 10.1038/s41467-025-68096-3  
et al.. 1,2,4-Triazole-Acetamide Conjugates as hEGFR Inhibitors: Synthesis, Anticancer Evaluation, and In Silico Studies.. (2026). DOI: 10.1002/cbdv.202503299  
et al.. Asymmetric Mannich Reaction of  $\alpha$ -(2-Nitrophenylsulfenyl)imino Acetamide: A Cyclization-Driven Process.. (2026). DOI: 10.3390/molecules31030449  
et al.. New 5,6-diphenyl-1,2,4-triazine-hydrazineylidene-phenoxy-1,2,3-triazole-acetamide derivatives as potent synthetic  $\alpha$ -glucosidase inhibitors.. (2025). DOI: 10.1039/d5ra06909b

## Full text of H statements

**H351** Suspected of causing cancer

## Full text of P statements

**P201** Obtain special instructions before use

**P202** Do not handle until all safety precautions have been read and understood

**P280** Wear protective gloves/protective clothing/eye protection/face protection

**P308+P313** IF exposed or concerned: 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

**v1 (22.09.2026)** Based on ECHA harmonised classification (Annex VI to CLP, ATP 23).

## References

- [1] EP and Council. Reg.(EC) No 1907/2006 (REACH). Art.31, Annex II. OJ EU L 396/2006. URL: <https://eur-lex.europa.eu/eli/reg/2006/1907/oj> Accessed: 2026-09-22.
- [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: 2026-09-22.
- [3] EP and Council. Reg.(EC) 1272/2008 (CLP) + ATP 23. OJ EU L 353/2008. (2026-07-07) URL: <https://eur-lex.europa.eu/eli/reg/2008/1272/oj> Accessed: 2026-09-22.
- [4] United Nations. GHS Rev.9. ST/SG/AC.10/30/Rev.9. New York and Geneva: United Nations, 2021. URL: <https://unece.org/transport/dangerous-goods/ghs-rev9-2021> Accessed: 2026-09-22.
- [5] ISO. ISO 7010:2019 — Graphical symbols. Safety signs. URL: <https://www.iso.org/standard/72424.html> Accessed: 2026-09-22.

- [6] ISO. ISO 3864-1:2011 — Safety colours and safety signs. URL: <https://www.iso.org/standard/51021.html> Accessed: 2026-09-22.
- [7] PubChem. National Center for Biotechnology Information (NIH/NLM), chemical compound database. URL: <https://pubchem.ncbi.nlm.nih.gov/compound/178>
- [8] NIST. Chemistry WebBook, SRD 69. National Institute of Standards and Technology. URL: <https://webbook.nist.gov/cgi/cbook.cgi?ID=60-35-5>
- [9] Rumble, J.R., ed. CRC Handbook of Chemistry and Physics. 105th ed. Boca Raton: CRC Press, 2024. URL: <https://hbcpc.chemnetbase.com>
- [10] ECHA. European Chemicals Agency — harmonised classification inventory (CLP Annex VI). URL: <https://echa.europa.eu>
- [11] European Commission. Decision 2000/532/EC establishing a list of wastes (European Waste Catalogue). OJ EU L 226/3. URL: <https://eur-lex.europa.eu/eli/dec/2000/532/oj>
- [12] European Chemicals Agency (ECHA). Guidance on the Compilation of Safety Data Sheets. Version 4.0. Helsinki: European Chemicals Agency, 2020. URL: [https://echa.europa.eu/documents/10162/2324906/sds\\_en.pdf](https://echa.europa.eu/documents/10162/2324906/sds_en.pdf)
- [13] Urban, P.G., ed. Bretherick's Handbook of Reactive Chemical Hazards. 8th ed. Oxford: Academic Press.
- [14] Act of 26 June 1974 — Labour Code (Poland), Art. 176 § 1. Journal of Laws 2023 item 1465. URL: <https://isap.sejm.gov.pl>
- [15] Council of Ministers of the Republic of Poland. Regulation of 3 April 2017 on the list of arduous, hazardous or health-harmful work for pregnant and breastfeeding women. Journal of Laws 2017 item 796. URL: <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20170000796>
- [16] CEN. Personal protective equipment standards (EN ISO 374-1, EN 166, EN 149, EN 14387, EN ISO 20345). Brussels: European Committee for Standardization.
- [17] ECHA. Guidance on Information Requirements and Chemical Safety Assessment, Chapter R.11: PBT/vPvB Assessment. Helsinki: European Chemicals Agency. URL: <https://echa.europa.eu/guidance-documents/guidance-on-information-requirements-and-chemical-safety-assessment>
- [18] European Parliament and Council. Regulation (EC) No 1907/2006 (REACH), Annex XIII — Criteria for the identification of PBT and vPvB substances. OJ EU L 396/2006 (consolidated). URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006R1907-20140410>
- [19] IARC. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon: International Agency for Research on Cancer. URL: <https://monographs.iarc.who.int>
- [20] 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: 2026-09-22.

### External links

NIST: <https://webbook.nist.gov/cgi/cbook.cgi?ID=60-35-5>  
 Wikidata: <https://www.wikidata.org/wiki/Q421721>  
 ChEMBL: [https://www.ebi.ac.uk/chembl/compound\\_report\\_card/CHEMBL16081](https://www.ebi.ac.uk/chembl/compound_report_card/CHEMBL16081)

**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 generated automatically from ECHA harmonised classification (Annex VI to CLP) and public physicochemical databases.

**Author:** [www.MolGod.org](http://www.MolGod.org) — platform for automated safety data sheets (SDS).

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