

SAFETY DATA SHEET (SDS)

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

Date: 18.07.2026 | Version: 1 | EN

Anilina

aniline

CAS 62-53-3

C₆H₇N

EC 200-539-3



MOLAR MASS
93.13

LOGP
0.9

HAZARD CLASSIFICATION (GHS / CLP)



Danger

H351 H341 H331 H311 H301 H372 H318 H317 H400

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

1.1 Substance name	Anilina
1.1 IUPAC name	aniline
1.1 CAS number	62-53-3
1.1 EC number	200-539-3
1.1 PubChem CID	6115
1.1 InChIKey	PAYRUJLWNCNPSJ-UHFFFAOYSA-N
1.1 SMILES	C1=CC=C(C=C1)N
1.1 Molecular formula	C ₆ H ₇ N ^[7]
1.1 Molar mass	93.13 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

Name	ADVANCED CHEMISTRY R&D SOLUTIONS
Address	ul. Juliana Przybosa 8, 21-400 Łuków, Poland
Tax ID (NIP)	
Tel.	
E-mail	
Website	

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: 

Prohibitions: 

Danger

Hazard statements (H) ^{[3][4][10]}

H351	Suspected of causing cancer
H341	Suspected of causing genetic defects
H331	Toxic if inhaled
H311	Toxic in contact with skin
H301	Toxic if swallowed
H372	Causes damage to organs through prolonged or repeated exposure
H318	Causes serious eye damage
H317	May cause an allergic skin reaction
H400	Very toxic to aquatic life

Precautionary statements (P) ^{[3][4][10]}

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
P273	Avoid release to the environment
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
P310	Immediately call a POISON CENTER or doctor/physician
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
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
P391	Collect spillage
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	62-53-3
EC number	200-539-3
Molecular formula	C ₆ H ₇ N
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. Call a physician. Semi-sitting position. Give oxygen if available. 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. Call an ophthalmologist immediately. ^{[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 42 631 47 24 (24/7). Emergency number: 112. ^{[1][2][14]}

Symptoms and effects

nausea, vomiting, diarrhoea; cough, shortness of breath, headache, dizziness; eye irritation and watering. ^{[3][10]}

Notes for physician

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

Emergency numbers: CIT Łódź: +48 42 631 47 24 (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	70°C ^[8]
Auto-ignition temperature	615°C ^[8]

6. Accidental release measures

Personal precautions	Use personal protective equipment (see Section 8). Avoid breathing vapours. ^{[1][2][14]}
Environmental precautions	Prevent entry into sewers, groundwater and surface water. ^{[1][2][14]}
Methods for containment and cleaning up	Contain the spill with a barrier. Absorb with inert material (sand, vermiculite, diatomaceous earth). Collect into sealed, labelled containers. Do not release into drains. ^{[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)	NDS = 1.9 mg/m ³ (TWA) · NDSch = 3.8 mg/m ³ (STEL) — Polish MRPIPS Regulation (NDS/NDSch list) ^[21]
OEL (EU)	OEL-TWA: 2 ppm (7.74 mg/m ³) — IOELV 2019/1831/EU — “skin” notation ^[11]
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-P3 filter (organic vapours + particles)



Face shield (splash risk)

EN ISO 16321-1:2022



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)

9. Physical and chemical properties

Property (item 9.1)	Value	Source
Physical state	Liquid	
Colour	Oily liquid; colorless when freshly distilled, darkens on exposure to air and light ^[7]	
Odour	Hedonic tone; pungent ^[7]	
pH (1% aqueous solution)	No data available.	
Melting point	-6°C ^[8]	
Boiling point	184.1°C ^[8]	
Flash point	70°C ^[8]	
Flammability	No data available.	
Lower and upper explosion limit	No data available.	
Density (20°C)	1.022 g/cm ³ ^[8]	
Vapour pressure	0.1 kPa (0.49 mmHg, 25°C) ^[8]	
Relative vapour density	No data available.	
Dynamic viscosity	3.77 mPa·s ^[8]	
Kinematic viscosity	No data available.	
Refractive index n _D ²⁰	1.5863 ^[8]	
Auto-ignition temperature	615°C ^[8]	
Decomposition temperature	Not applicable	
Surface Tension	42.7 mN/m ^[8]	
Water solubility (20°C)	36 g/L, 25°C ^[8]	
Particle characteristics	Not applicable (REACH 9.1(r))	
Partition coefficient n-octanol/water (log value)	0.9 ^[8]	
TPSA	26 Å ² ^[7]	
HBD / HBA	No data available. / No data available.	
Rotatable bonds	No data available.	
Molar mass	93.13 g/mol ^[7]	
Molecular formula	C ₆ H ₇ N ^[7]	

10. Stability and reactivity

Reactivity	Stable under normal storage and handling conditions. ^[15]
Chemical stability	Thermally stable under recommended conditions. ^[15]
Hazardous reactions	No hazardous reactions known under normal conditions. ^[15]
Conditions to avoid	High temperatures, direct sunlight, moisture. ^[15]
Incompatible materials	Strong oxidizers. ^[15]
Decomposition products	Thermal decomposition products: CO, CO ₂ , NO _x . ^[15]

11. Toxicological information

LD50 (oral)	250 mg/kg (rat) ^[9]
LD50 (dermal)	No data available.
LC50 (inhalation)	No data available.
Skin irritation	Not classified (no harmonised classification in CLP Annex VI) ^{[3][10]}
Eye irritation	Category 1 — serious eye damage. ^{[3][10]}
Sensitisation	Skin, Category 1 (H317): May cause an allergic skin reaction. ^{[3][10]}
Mutagenicity	Category 2 (CLP). ^{[3][10]}
Carcinogenicity	Category 2 (CLP). ^{[3][10]}
IARC classification (carcinogenicity)	IARC Group 2A — probably carcinogenic to humans.
Reproductive toxicity	Not classified (no harmonised classification in CLP Annex VI) ^{[3][10]}
STOT — single exposure	Not classified (no harmonised classification in CLP Annex VI) ^{[3][10]}
STOT — repeated exposure	Category 1 (H372): Causes damage to organs through prolonged or repeated exposure. ^{[3][10]}
Aspiration hazard	Not classified (no harmonised classification in CLP Annex VI) ^{[3][10]}

12. Ecological information

Aquatic toxicity	Harmonised classification (CLP Annex VI):H400 — Very toxic to aquatic life (Aquatic Acute 1). Numerical LC ₅₀ /EC ₅₀ data unverified in the available dataset — do not assume absence of toxicity.(M-factor for acute/chronic cat. 1 — to be verified per Table 3 of Annex VI, if assigned.)
Persistence / biodegradability	No data available.
Bioaccumulative potential	log Kow = 0.9 ^[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 1547 ^[12]
Proper shipping name	ANILINA ^[12]
Transport hazard class	6.1 — Toxic substances ^[12]
Packing Group	II ^[12]

Environmental hazard	CLP classification (H400/H410/H411) indicates aquatic environmental hazard — marine pollutant marking may be required; confirm per ADR 2.2.9 / IMDG criteria ^[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 good. Toxic; aquatic hazard — see Section 12.
Environmentally hazardous (mark: fish and tree)	Yes

15. Regulatory information

SVHC status	SVHC status not verified against the available dataset — check the current ECHA Candidate List; do not assume absence. ^[1]
REACH Annex XIV	Not verified against the ECHA Authorisation List — check REACH Annex XIV. ^[1]
REACH Annex XVII	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]
Verification date	2026-07-18

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 18.07.2026 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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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 (18.07.2026)	Prepared on the basis of the ECHA harmonised classification (Annex VI to CLP, ATP 23).
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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: 2026-07-18.

- [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: 2026-07-18.
- [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: 2026-07-18.
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- [6] ISO. ISO 3864-1:2011 — Safety colours and safety signs. URL: <https://www.iso.org/standard/51021.html> Accessed: 2026-07-18.
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- [8] Rumble, J.R., ed. CRC Handbook of Chemistry and Physics. 105th ed. Boca Raton: CRC Press, 2024. URL: <https://hbcpc.chemnetbase.com> Accessed: 2026-07-18.
- [9] NIOSH. Registry of Toxic Effects of Chemical Substances (RTECS). Cincinnati: NIOSH. URL: <https://www.cdc.gov/niosh/rtecs> Accessed: 2026-07-18.
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- [11] European Commission. Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values. OJ EU L 38/36. URL: <https://eur-lex.europa.eu/eli/dir/2006/15/oj> Accessed: 2026-07-18.
- [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: 2026-07-18.
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- [16] Act of 26 June 1974 — Labour Code (Poland), Art. 176 § 1. Journal of Laws 2023 item 1465. URL: <https://isap.sejm.gov.pl> Accessed: 2026-07-18.
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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: 2026-07-18.

External links

NIST: <https://webbook.nist.gov/cgi/cbook.cgi?ID=62-53-3>

ChEMBL: https://www.ebi.ac.uk/chembl/compound_report_card/ChEMBL5997512

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

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