Safety Data Sheet

According to the UN GHS revision 8

Creation Date: April 29, 2026
Revision Date: April 29, 2026

1. IDENTIFICATION

1.1 GHS Product identifier

Product name: Indole

Catalog Number: T4799

CAS Number: 120-72-9

1.2 Other means of identification

Other names: -

1.3 Recommended use of the chemical and restrictions on use

Identified uses: no data available

1.4 Supplier's details

Company: Targetmol Chemicals Inc.

Address: 34 Washington Street, Wellesley Hills, Massachusetts 02481 USA

Tel/Fax: (781) 999-4286

1.5 Emergency phone number

Emergency phone number: 781-999-4286

Service hours: Monday to Friday, 9am-5pm (Standard timezone: UTC/GMT -5 hours).

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Acute toxicity - Category 4, OralAcute toxicity - Category 3, DermalSkin sensitization, Category 1Serious eye damage, Category 1

2.2 GHS label elements, including precautionary statements

Pictogram(s): unknown

Signal word: Danger

Hazard statement(s): H302 Harmful if swallowedH311 Toxic in contact with skinH317 May cause an allergic skin reactionH318 Causes serious eye damage

Precautionary statement(s):

Prevention: P264 Wash ... thoroughly after handling.P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...P261 Avoid breathing dust/fume/gas/mist/vapours/spray.P272 Contaminated work clothing should not be allowed out of the workplace.

Response: P301+P317 IF SWALLOWED: Get medical help.P330 Rinse mouth.P302+P352 IF ON SKIN: Wash with plenty of water/...P316 Get emergency medical help immediately.P321 Specific treatment (see ... on this label).P361+P364 Take off immediately all contaminated clothing and wash it before reuse. P333+P317 If skin irritation or rash °Ccurs: Get medical help.P362+P364 Take off contaminated clothing and wash it before reuse.P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.P317 Get medical help.

Storage: P405 Store l°Cked up.

Disposal: P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance

with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in classification

no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number
Indole	-	120-72-9	204-420-7

4. FIRST-AID MEASURES

4.1 Description of necessary first-aid measures

General advice

White.

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a d°Ctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a d°Ctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a d°Ctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a d°Ctor or Poison Control Center immediately.

4.2 Most important symptoms/effects, acute and delayed

no data available

4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2 Specific hazards arising from the chemical

no data available

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours.Avoid contacting with skin and eye. Use personal protective equipment.Wear chemical impermeable gloves. Ensure adequate ventilation.Remove all sources of ignition. Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Transparent
Odour	ALMOST FLORAL ODOR WHEN HIGHLY PURIFIED, OTHERWISE EXHIBITS CHARACTERISTIC ODOR OF FECES
Melting point/freezing point	Ca. 52 °C.
Boiling point or initial boiling point and boiling range	Ca. 253 °C. Atm. press.:Ca. 762 mm Hg.
Flammability	no data available
Lower and upper explosion limit/flammability limit	no data available
Flash point	Ca. 110 °C. Atm. press.:Ca. 101 325 Pa.
Auto-ignition temperature	no data available

Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	DMSO: 60 mg/mL (512.16 mM),Sonication is recommended. Ethanol: 100 mg/mL (853.61 mM),Sonication is recommended. H2O: 3.52 mg/mL (30.05 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
N-octanol-water partition coefficient	log Pow = Ca. 2.24. Remarks:QSAR.
Vapour pressure	Ca. 0.012 mm Hg. Temperature:Ca. 25 °C.
Density and/or relative density	Ca. 1.22 g/cm3. Temperature:20 °C.
Relative vapour density	no data available
Particle characteristics	no data avaliable

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Not very stable on exposure to light (turns red)

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral: LD50 - rat (male) - ca. 1 000 mg/kg bw.Inhalation: no data availableDermal: LD50 - rabbit (male) - ca. 790 mg/kg bw.

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish: LC50 - ca. 19.76 mg/L - 96 h. Remarks:QSAR.Toxicity to daphnia and other aquatic invertebrates: LC50 - ca. 2 mg/L - 48 h. Toxicity to algae: EC50 - ca. 37.3 mg/L - 96 h.Toxicity to microorganisms: EC50 - >= 242.5 - <= 283.19 mg/L - 3 h.

12.2 Persistence and degradability

Groundwater containing a mixture of aromatic hydr°Carbons and aromatic nitrogen-, sulfur-, and oxygen-containing heter°Cyclics, including indole initially present at 0.2 to 1 mg/l, gave an aerobic degradation time (defined as the total time from the start of the experiment until a concn less than 1 ug/l is reached) for indole of 310 hours including an acclimation time of 130 hours at 10 deg C(1). Indole, in a 5 day BOD test, reached 49.5% of the theoretical BOD using a mixed microbial in°Culum obtained from an enrichment culture (2). A 5 day BOD test gave a BOD of 2.07 g/g for indole using a sewage in°Culum(3). First order biodegradation rate constants of 4.3X10-2 BOD/hr and 7.7X10-2 spec/hr were measured for indole at 1.6, 2.5, and 3.2 mg/l for a BOD and a UV spectrophotometry detection method, respectively; the in°Culum used was a mixed culture obtained from an enrichment culture technique(3). A reaction pathway for the aerobic biodegradation of indole was proposed: indole to indoxyl to dihydroxyindole to isatin to formylanthranilic acid to anthranilic acid to catechol(5). Indole, added to Chernozem soil at 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 g/kg soil, was completely biodegraded in 19, 37, 62, 72, 84, 92, 102, 131, and 135 days, respectively(6).

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

A K°C of 187 was measured for indole on a synthetic soil consisting of 88-90% sand, 10% clay and 0-2% humic acid(1). The K°C of indole is estimated as approximately 350(SRC), using a measured log Kow of 2.14(2) and a regression-derived equation(3,SRC). According to a recommended classification scheme(4), these K°C values suggest that indole has moderate mobility in soil(SRC).

12.5 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. TRANSPORT INFORMATION

14.1 UN Number

no data available

14.2 UN Proper Shipping Name

no data available

14.3 Transport hazard class(es)

no data available

14.4 Packing group, if applicable

no data available

14.5 Environmental hazards

no data available

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZI°C)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

16. OTHER INFORMATION

Information on revision

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Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.homeHSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htmIARC - International Agency for Research on Cancer, website: http://www.iarc.fr/eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_l°Cale=enCAMEO Chemicals, website: http://came°Chemicals.noaa.gov/search/simpleChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jspERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/ergGermany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jspECHA - European Chemicals Agency, website: https://echa.europa.eu/

Other Information

no data available