

SAFETY DATA SHEET

Creation Date 21-September-2010 Revision Date 16-March-2018 Revision Number 1

1. Identification

Product Name Indole

Cat No. : A14427

CAS-No 120-72-9

Synonyms 2,3-Benzopyrrole

Recommended UseLaboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757

Email: tech@alfa.com

www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (800) 579-7421.

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicityCategory 4Acute dermal toxicityCategory 3Serious Eye Damage/Eye IrritationCategory 1Skin SensitizationCategory 1

Label Elements

Signal Word

Danger

Hazard Statements

Harmful if swallowed Toxic in contact with skin May cause an allergic skin reaction Causes serious eye damage

Indole



Precautionary Statements

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Contaminated work clothing should not be allowed out of the workplace

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

Response

IF ON SKIN: Wash with plenty of soap and water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER/doctor

Rinse mouth

Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Light sensitive

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Indole	120-72-9	>95

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In

the case of contact with eyes, rinse immediately with plenty of water and seek medical

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth Inhalation

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Causes severe eye damage. May cause allergic skin reaction. Rapidly absorbed through Most important symptoms/effects

skin: May be harmful if absorbed through skin: Symptoms of allergic reaction may include

rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness,

lightheadedness, chest pain, muscle pain or flushing

Indole

Notes to Physician Treat symptomatically

Fire-fighting measures

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Suitable Extinguishing Media

Unsuitable Extinguishing Media No information available

Flash Point 136 °C / 276.8 °F

Method -No information available

Autoignition Temperature

Explosion Limits

No data available Upper No data available Lower Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO2)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
3	1	0	N/A

Accidental release measures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. **Personal Precautions**

Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust Up

formation.

7. Handling and storage							
Handling	Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust						

tormation. Use only under a chemical fume hood. Do not breathe vapors/dust. Do not ingest.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away Storage

from direct sunlight.

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines**

limitsestablished by the region specific regulatory bodies.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to

control hazardous materials at source

Personal protective equipment

Eye Protection Goggles Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	> 480 minutes	> 480 minutes > 0.1 mm As tested under EN	
			Determination of Resistance to
			Permeation by Chemicals

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

9. Physical and chemical properties

Physical State Solid
Appearance Off-white
Odor Characteristic

Odor Threshold
pHNo information available5.91000g/L (20°C)

Melting Point/Range 51 - 53 °C / 123.8 - 127.4 °F

Boiling Point/Range253 - 254 °C / 487.4 - 489.2 °F @ 760 mmHg **Flash Point**136 °C / 276.8 °F

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure 0.012 mmHg @ 25 °C
Vapor Density Not applicable

Vapor Density Not applicable Specific Gravity 1,220

Solubility

No information available

Partition coefficient; n-octanol/water No data available
Autoignition Temperature

Decomposition Temperature> 253°CViscosityNot applicableMolecular FormulaC8 H7 NMolecular Weight117.15

Indole

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Sensitivity to light.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation. Exposure to light.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO₂), Carbon dioxide (CO₂)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
Indole	Indole LD50 = 1 g/kg (Rat)		Not listed		

Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes severe eye burns Irritating to respiratory system

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico	
Indole	120-72-9	Not listed					

Mutagenic Effects No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and Rapidly absorbed through skin: May be harmful if absorbed through skin: Symptoms of

delayed

allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands

and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Indole Revision Date 16-March-2018

Ecotoxicity

Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

	Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea	
Г	Indole	Not listed	Onchorhynchus mykiss:	Not listed	1 mg/L 48h	
			LC50=10 mg/L 24h		_	

Persistence and Degradability

Persistence is unlikely

Bioaccumulation/ Accumulation

No information available.

Mobility

Will likely be mobile in the environment due to its water solubility.

Component	log Pow		
Indole	2.14		

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Proper technical name (INDOLE)
Hazard Class 6.1
Packing Group III

TDG

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6.1
Packing Group

<u>IATA</u>

UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.*

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6.1 Packing Group III

15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Component	DSL	NDSL	TSCA	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Indole	Χ	-	Χ	204-420-7	-		Х	Х	Χ	Х	Х

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

16. Other information

Indole Revision Date 16-March-2018

Prepared By Product Safety Department

Email: tech@alfa.com

www.alfa.com

Creation Date21-September-2010Revision Date16-March-2018Print Date16-March-2018

Revision Summary Mise à jour des systèmes de création SDS, remplace ChemGes SDS No. 120-72-9/2.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS