

MATERIAL SAFETY DATA SHEET

CONTACT : LEONID CHEMICALS

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1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Indole

Chemical Name of Active Ingredient(s): 2,3- Benzopyrrole; Ketole; 1-Benzazole; Benzopyrrole

Manufacturer: LEONID CHEMICALS 62/A-2 2nd Stage, Industrial Suburb Yeshwanthpur, Bangalore -22, INDIA

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2.0 PRODUCT IDENTIFICATION & COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 2,3- Benzopyrrole; Ketole; 1 Benzazole; Benzopyrrole

CAS No.: 120-72-9

Molecular Weight: 117.15 FEMA G.R.A.S No: 2593 EINECS No: 201-471-7 Chemical Formula: C8H7N

Information on Hazardous Ingredients

Ingredient CAS No Percent Hazardous Indole 120-72-9 90 - 100 % Yes

3.0 POSSIBLE HAZARDS/ HAZARDS IDENTIFICATION

Emergency Overview

Warning:

Harmful if swallowed or absorbed through skin. Causes irritation to eyes and skin.

Advice on critical hazards to human being and the environment:

Information on the human health effects from exposure to this substance is limited.

Inhalation:

May be irritating if inhaled.

Ingestion:

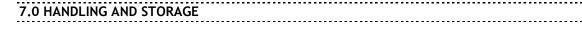
May be harmful if swallowed.

Skin Contact:

Causes irritation. May be absorbed through skin.



Eye Contact :
Causes irritation.
Chronic Exposure: No information found.
Aggravation of pre-existing conditions :
No information found
4.0 FIRST AID MEASURES
General Advice : Remove contaminated clothing
Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give
oxygen. Get medical attention.
Ingestion:
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth
to an unconscious person. Get medical attention. Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes while removing
contaminated clothing and shoes. Get medical attention. Wash clothing before reuse.
Eye Contact :
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper
eyelids occasionally. Get medical attention immediately.
5.0 FIRE FIGHTING MEASURES
Fire:
Not considered to be a fire hazard.
Explosion:
Not considered to be an explosion hazard.
Suitable Extinguishing Media:
Carbon dioxide, Universal type- foam, dry extinguishing media. Special Information:
In the event of a fire, wear appropriate personal protective clothing and NIOSH-approved self-
contained breathing apparatus with full face shield operated in the pressure demand or other
positive pressure mode.
rurtiler information.
Fire debris must be disposed of in accordance with local regulations.
6.0 ACCIDENTAL RELEASE MEASURES



Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in section 8. Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping



may be used to avoid dust dispersal.

Keep in tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); Observe all warnings and precautions listed for the product.

8.0 EXPOSURE CONTROLS/ PERSONAL PROTECTION

Airborne Exposure Limits:

None established

Ventilation System:

A system of local and/or general exhaust is recommended to keep the employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive, air-supplied respirator.

Warning:

Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eve Protection:

Use chemical safety goggles and or full face shield where splashing of solution is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

Appearance : White Crystals.
Odor : Intense fecal odor.
Solubility : Soluble in hot water.

Specific gravity 60/4 : 1.0643...
Refractive Index 60/D : 1.609.

pH : No information found.

% Volatiles by Volume : zero
Boiling Point : 253°C (760 mm); 123 (5 mm)

Boiling Point : 253°C (760 mm); 123 (5 mm)
Melting Point : 52°C

Flash Point : 128°C (Approx)
Vapor Density(Air=1) : No information found.
Vapor Pressure(mm Hg) : No information found.
Evaporation Rate (BuAc=1) : No information found.



10.0 STABILITY AND REACTIVITY

Stability : Stable under ordinary conditions of use and

storage. Becomes darker in color on exposure

to light.

Hazardous decomposition Products : Burning may produce carbon monoxide, carbon

dioxide.

Hazardous Polymerization : Will not occur.

Incompatibilities : Strong oxidizing agents, iron and iron salts. Conditions to Avoid : Heat, flame, other sources of ignition.

11.0 TOXICOLOGICAL INFORMATION

Oral rat LD50: 1100 mg/Kg; Skin rabbit LD50: 790 mg/kg; Irritant (std Draize) rabbit: 750 ?g/24 hour, severe . Investigated as tumorigen.

-----\ Cancer Lists \ ------

Ingredient Known Anticipated IARC Category

Indole (120-72-9) No No None

12.0 ECOLOGICAL INFORMATION

nvironmental Fate : No information found. Environmental Toxicity : No information found.

13.0 DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14.0 TRANSPORT INFORMATION

Not regulated.

15.0 REGULATORY INFORMATION

Chemical Inventory Status - (Part-I) Ingredient: Indole (120-72-9):

TSCA: YES; EC: YES; JAPAN: YES; AUSTRALIA: YES

Chemical Inventory Status - (Part-II)

Ingredient : Indole (120-72-9)

KOREA: YES Canada (DSL): Yes; Canada (NDSL): No; Phil: Yes



Federal, state & International Regulations-Part 1

SARA 302: RQ - No; TPQ - No;

SARA 313: List - No; Chemical catg - No

Federal, state & International Regulations- Part 2 CERCLA: No; RCRA 261.33: No; TSCA 8 (d): No

Chemical Weapons Convention: No TSCA 12 (b): No CDTA: No SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No

Reactivity: No (Pure/Solid)

Australian Hazchem Code: No information found.

Poison Schedule: No information found.

Whmis : This MSDS has been prepared according to the

hazard criteria of the controlledproducts regulations (CPR) and the MSDS contain all of

the information required by the CPR.

16.0 OTHER INFORMATION

NFPA Ratings: Health: - 1 Flammability:1 Reactivity: 0

Product Use : Industrial

Revision Information : Pure. New 16 section MSDS format, all sections

have been revised.

Disclaimer:

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