An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Indole, GR 99%

Product Code: I 1287 CAS No: 120-72-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Dermal (Category 3), H311

Eye irritation (Category 2), H319

Short-term (acute) aquatic hazard (Category 1), H400

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard statement(s)

H302

H311 H319

H400

Precautionary statement(s)

P264 P273 P280

P301 + P312

P302 + P352 + P312

P305 + P351 + P338

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Hazard statement(s)

H311

Precautionary statement(s)

P302 + P352 + P312

Supplemental Hazard

Danger

Harmful if swallowed.

Toxic in contact with skin.

Causes serious eye irritation.

Very toxic to aquatic life.

Wash skin thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

unwell

IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/

doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

none

Danger

Toxic in contact with skin.

IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/

doctor if you feel unwell.

none

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Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms: 1H-Benzo[b]pyrrole

Formula : C8H7N Molecular weight : 117,15 g/mol CAS-No. : 120-72-9 EC-No. : 204-420-7

Component	Classification	Concentration
indole		
CAS-No. 120-72-9	Acute Tox. 4; Acute Tox. 3; Eye Irrit. 2;	<= 100 %
EC-No. 204-420-7	Aquatic Acute 1; H302, H311, H319,	
	H400 M-Factor - Aquatic Acute: 1	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact

lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

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Nitrogen oxides (NOx)

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by

keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible

only to qualified or authorized persons.

Air and light sensitive.

Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet,

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supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de). Splash contact

Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection protective clothing Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to

the used respiratory protection system.

Recommended Filter type: Filter type P3
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color

c) Odor

d) Melting point/freezing point

e) Initial boiling point

and boiling range f) Flammability (solid,

gas)

g) Úpper/lower

flammability or

explosive limits

h) Flash point i) Autoignition

temperature

j) Decomposition

temperature

k) pH I) Viscosity

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

p) Density

Relative density q) Relative vapor

density

r) Particle

characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

Relative vapor density

flakes

white, to, beige characteristic

Melting point/range: 51 - 54 °C - lit.

253 - 254 °C - lit.

No data available

No data available

121 °C - closed cup No data available

> 253 °C

No data available

Viscosity, kinematic: No data available Viscosity, dynamic: No data available

at 20 °C soluble in hot water

log Pow: 2,14 - (Lit.), Bioaccumulation is not expected.

0,016 hPa at 25 °C 1,22 g/cm3 at 20 °C No data available No data available

No data available

No data available

none

5.6

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SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

The following applies in general to flammable organic substances and mixtures: in

correspondingly fine distribution, when whirled up a dust explosion potential may generally

be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Iron

iron(III) compounds

10.4 Conditions to avoid

Air Light.

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 1 mg/l - 48 h

Remarks: (Lit.)

Toxicity to algae static test EC50 - Scenedesmus acuminatus - 9,42 mg/l - 96 h

Remarks: (ECHA)

Toxicity to bacteria microtox test EC50 - Photobacterium phosphoreum - 2,4 mg/l - 30

min

Remarks: (Lit.)

12.2 Persistence and degradability

Biodegradability Result: 100 % - Readily biodegradable.

(OECD Test Guideline 301B)

Biochemical Oxygen

Demand (BOD)

2.070 mg/g

Remarks: (Lit.)

Theoretical oxygen

demand

2.460 mg/g

Remarks: (Lit.)

Ratio BOD/ThBOD 84 %

Remarks: (Lit.)

12.3 Bioaccumulative potential

No data available

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IATA: 2811

IATA: 6.1

IATA: III

IATA: no

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number ADR/RID: 2811 IMDG: 2811

14.2 UN proper shipping name

ADR/RID : TOXIC SOLID, ORGANIC, N.O.S. (indole) (indole) IMDG : TOXIC SOLID, ORGANIC, N.O.S. (indole) (indole)

IATA : Toxic solid, organic, n.o.s. (indole) (indole)

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1

14.4 Packaging group

ADR/RID: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes

14.6 Special precautions for user

Tunnel restriction code : (E)

Further information : No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the

substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No.

1907/2006.

National legislation

Seveso III: Directive 2012/18/EU of the

European Parliament and of the Council

on the control of major-accident hazards

involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or

stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

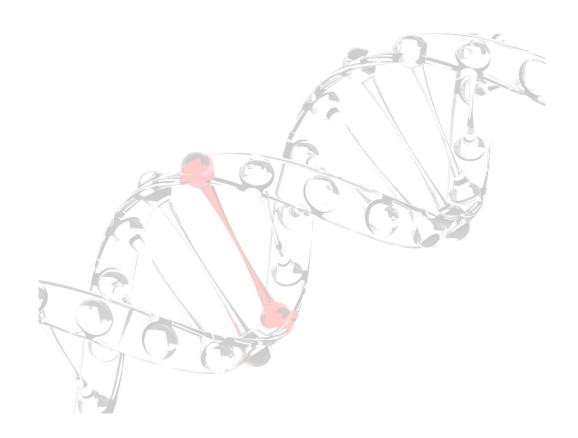
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