

IMIDAZOLE, AR GRADE

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: IMIDAZOLE, AR GRADE

Product Code: 342 CAS#: 288-32-4

Synonym: Not available Chemical Formula: C₃H₄N₂ Molecular weight: 68.08

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:

Name: IMIDAZOLE, AR GRADE

CAS#: 288-32-4

Chemical Formula: C₃H₄N₂ Molecular weight: 68.08

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture: Not a hazardous substance or mixture according to Regulation (EC) No

1272/2008: Acute toxicity, (Category 4) H302: Harmful if swallowed.

Skin corrosion, (Sub-category 1C) H314: Causes severe skin burns and eye damage.

Serious eye damage, (Category 1) H318: Causes serious eye damage. Reproductive toxicity, (Category H360D: May damage the unborn child

Other hazards: This substance/mixture contains no components considered to be either persistent, bio accumulative

and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 4: FIRST AID MEASURES

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. Call in physician.

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. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralize

Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labeling

Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: FIRE AND EXPLOSION DATA

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









MATERIAL SAFETY DATA SHEET

Special hazards arising from the substance or mixture: Carbon oxides Nitrogen oxides (NOx) Hydrogen cyanide (hydrocyanic acid) 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. 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.

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

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

Environmental precautions: Do not let product enter drains

Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Advice on safe handling Work under hood. Do not inhale substance/mixture **Storage Class:** Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

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

Specific end use(s) A part from the uses: No other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls:

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: protective clothing

Respiratory protection: 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 entrepreneur 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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form : Colorless crystalline powder

Color: Not availableOdor: Not availableOdor Threshold: Not available

pH : 9.5 – 11.0

Melting point/freezing point : Not available

Initial boiling point and boiling range : Not available







MATERIAL SAFETY DATA SHEET

Flash point : Not available **Evaporation rate** : Not available Flammability (solid, gas) : Not available Upper/lower flammability or explosive limits : Not available Vapor pressure : Not available Vapor density : Not available Relative density : Not available Water solubility : Not available **Partition coefficient** : Not available **Auto-ignition temperature** : Not available

SECTION 10: STABILITY AND REACTIVITY DATA

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 **Chemical stability:** Stable under recommended storage conditions

Possibility of hazardous reactions: Violent reactions possible with: Strong oxidizing agents Acid chlorides Acid

anhydrides acids

Conditions to avoid: Strong heating **Incompatible materials:** Not available

Hazardous decomposition products other decomposition products: Not available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 Oral - Rat - 970 mg/kg (OECD Test Guideline 401) Acute toxicity estimate Oral - 970 mg/kg (ATE value derived from LD50/LC50 value) Inhalation: No data available Dermal: No data available

Skin corrosion/irritation: Skin - Rabbit Result: Corrosive after 1 to 4 hours of exposure - 4 h (OECD Test Guideline 404)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation: Eyes - Rabbit Result: Causes serious eye damage. (OECD Test Guideline 405)

Remarks: Causes serious eye damage

Respiratory or skin sensitization: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 341,5 mg/l - 48 h (Regulation (EC) No. 440/2008, Annex, C.2)

Toxicity to algae static test ErC50 - Desmodesmus subspicatus (green algae) - 133 mg/l - 72 h

Toxicity to bacteria static test EC50 - activated sludge - > 1.000 mg/l - 30 min (OECD Test Guideline 209)

Persistence and degradability: Biodegradability aerobic - Exposure time 18 d Result: 90 - 100 % - Readily

biodegradable. (OECD Test Guideline 301A) **Bio accumulative potential**: Not available

Mobility in soil: Not available

Results of PBT and vPvB assessment PBT/vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION







MATERIAL SAFETY DATA SHEET

UN number:

ADR/RID: 3263 IMDG: 3263 IATA: 3263

UN proper shipping name

ADR/RID: Corrosive solid, basic, organic, n.o.s. (Imidazole) IMDG: Corrosive solid, basic, organic, n.o.s. (Imidazole) IATA: Corrosive solid, basic, organic, n.o.s. (Imidazole)

Transport hazard class(es):

ADR/RID: 8 IMDG: 8 IATA: 8

Packaging group:

ADR/RID: III IMDG: III IATA: III

Environmental hazards:

ADR/RID: No IMDG Marine pollutant: No IATA: No

SECTION 15: OTHER REGULATORY INFORMATION

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.

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

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H360D May damage the unborn child **Special Considerations:** Not available

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.



