

Imidazole, Crystal, ACS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Imidazole, Crystal, ACS

Synonyms/Generic Names: 1,3-Diaza-2,4-cyclopentadiene; 1,3-Diazole; Glyoxaline; 1-Imidazole; Pyrro[b]monazole.

Product Number: 2738

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Harmful by ingestion, Corrosive, Teratogen

Target Organs: Not Available

Signal Words: Danger

Pictograms:



GHS Classification:

Acute toxicity, Oral	Category 4
Skin corrosion	Category 1B
Serious eye damage	Category 1
Reproductive toxicity	Category 1B

GHS Label Elements, including precautionary statements:

Hazard Statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H360	May damage fertility or the unborn child.

Precautionary Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dusts or mists.
P264	Wash hands thoroughly after handling.

P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/physician.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes eye burns.
Inhalation	Extremely destructive to the mucous membranes and upper respiratory tract. May be harmful if inhaled.
Skin	May cause burns. Harmful if absorbed through skin.
Ingestion	Causes gastrointestinal irritation and possible burns. Harmful if swallowed. May cause adverse reproductive effects.

NFPA Ratings

Health	3
Flammability	1
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	3
Fire	1
Reactivity	0
Personal	Not Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Imidazole	>99	288-32-4	206-019-2	C ₃ H ₄ N ₂	68.08 g/mol

4. FIRST-AID MEASURES

Eyes	Immediately rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for surrounding fire conditions. Cool unopened containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

Specific hazards arising from the chemical	Emits toxic fumes (nitrogen oxides, carbon oxides, hydrogen cyanide) under fire conditions. (See also Stability and Reactivity section.) Powdered material may lead to dust explosion.
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Pick up and arrange disposal without creating dust. Sweep up and place in suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Do not ingest or breathe dust. Protect exposed tissues.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area in tightly-closed, plainly-labeled containers. Protect against moisture and light. Maintain adequate ventilation. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety goggles or glasses.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear appropriate chemical-resistant gloves, apron and other protective clothing appropriate to the risk of exposure.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White to yellow solid.
Odor	Slight amine-like odor.
Odor threshold	Not Available
pH	9-11 at 6.8 g/L at 23°C (73°F)
Melting point/freezing point	89-91°C (52-56°F)
Initial boiling point and boiling range	256°C (528°F)
Flash point	145°C (293°F) closed cup

Evaporation rate	Negligible
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	0.002 mmHg (@ 20°C)
Vapor density	2.36 (air=1)
Relative density	Not Available
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Dust generation and/or excess heat.
Incompatible Materials	Oxidizing agents, acids, acid anhydrides
Hazardous Decomposition Products	Nitrogen oxides, carbon oxides, hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Skin- rabbit- corrosive
Eyes	Eyes-rabbit- Risk of serious damage to eyes- Draize test
Respiratory	Not Available
Ingestion	LD50 Oral – rat – 220 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Skin rash, pain, reddening, and irritation.
Eyes	Reddening, tearing, irritation.
Respiratory	Irritation of mucous membranes and upper respiratory tract, headache.
Ingestion	May cause nausea, vomiting, diarrhea, headache, discomfort.

Chronic Toxicity	Not Available
Teratogenicity	May damage the unborn child. Presumed human reproductive toxicant.
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Static test LC50- <i>Leuciscus idus</i> (golden orfe)- 280 mg/l- 48 h
Aquatic Invertebrate	EC50- <i>Daphnia</i> - 341.5 mg/l- 48 h
Terrestrial	Not Available

Persistence and Degradability	Aerobic - Result: 86% - Readily biodegradable
Bioaccumulative Potential	Does not accumulate
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN3263, Corrosive solid, basic, organic, n.o.s., (Imidazole), 8, PG III
TDG	UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (IMIDAZOLE), 8, PG III
IMDG	UN3263, CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., (IMIDAZOLE), 8, PG III
Marine Pollutant	No
IATA/ICAO	UN3263, Corrosive solid, basic, organic, n.o.s., (Imidazole), 8, PG III

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard, Chronic Health Hazard
SARA 312	Acute Health Hazard, Chronic Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive material Class D-2A: Poisonous and infectious material- Other effects- Very toxic

16. OTHER INFORMATION

Revision	Date
Revision 1	07-08-2011
Revision 2	10/17/2013
Revision 3	02/10/2015
Revision 4	09/05/2017

Disclaimer: The information provided in this Safety Data Sheet ("SDS") is correct to the best of our knowledge, information and belief at the date of publication. The information in this SDS relates only to the specific Product identified under Section 1, and does not relate to its use in combination with other materials or products, or its use as to any particular process. Those handling, storing or using the Product should satisfy themselves that they have current information regarding the particular way the Product is handled, stored or used and that the same is done in accordance with federal, state and local law. WE DO NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE. WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.