

MATERIAL SAFETY DATA SHEET

www.britisscientific.com

Section 1- Chemical Product Information and Company Identification.

Product Name: : Ondansetron Impurity E.
Synonym: : 1H-imidazole.
Product code: : BS16777.
CAS Number: : 288-32-4.
Company Name: : Briti Scientific.
Company Address: : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055.
Telangana, India.

Section 2- Hazards Identification.

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute oral toxicity	Category 4
Skin Corrosion/Irritation	Category 1 C
Serious Eye Damage/Eye Irritation	Category 1
Reproductive Toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system. Combustible dust	Yes

Label Elements

Signal Word

Danger.

Hazard Statements

May form combustible dust concentrations in air
Harmful if swallowed
Causes severe skin burns and eye damage
May cause respiratory irritation
May damage the unborn child



Precautionary Statements

Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Eyes

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

Rinse mouth

Do NOT induce vomiting

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

Section 3- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
288-32-4.	1-Imidazole	C ₃ H ₄ N ₂ .

Section 4- First Aid Measures.

General Advice: If symptoms persist, call a physician.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact: If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion: Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.

Most important symptoms and effects: None reasonably foreseeable.

Notes to Physician: Treat symptomatically.

Section 5- Fire Fighting Measures.

Suitable Extinguishing Media: Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam. Water mist maybe used to cool closed containers.

Unsuitable Extinguishing Media: Carbon dioxide (CO₂)

Flash Point: 145 °C / 293 °F.

Method: No information available.

Autoignition Temperature: 480 °C / 896 °F.

Explosion Limits

Upper No data available.

Lower No data available.

Specific Hazards Arising from the Chemical: Flammable. Containers may explode when heated.

Sensitivity to Mechanical Impact: No information available.

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.

NFPA

Health	Flammability	Instability	Physical hazards
3	1	0	N/A

Section 6- Accidental Release Measures.

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions: Should not be released into the environment.

Methods for Containment and Clean Up: Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

Section 7- Handling and Storage.

Handling: Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition

Storage: Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents.

Section 8- Exposure Control/Personal Protection.

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Engineering Measures: Ensure adequate ventilation, especially in confined areas. Ensure that eye wash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Hand protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection: 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.

Recommended Filter type: Particulates filter conforming to EN 143.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9- Physical and Chemical Properties.

Physical State:	Powder to crystal.
Appearance:	White.
Odor:	Amine compounds.
Odor Threshold:	No information available.
pH:	10.5 (6.7% aq.sol.).
Melting Point/Range:	90°C.
Boiling Point/Range:	256°C.
Flash Point:	145 °C / 293 °F.
Evaporation Rate:	No data available.
Flammability (solid, gas):	Not applicable.
Flammability or explosive limits:	
Upper	No data available.
Lower	No data available.
Vapor Pressure:	0.003 mbar @ 20 °C.
Vapor Density:	No data available.
Solubility:	Soluble in chloroform.
Partition coefficient; n-octanol/water:	No data available.
Autoignition Temperature:	480 °C / 896 °F.
Decomposition Temperature:	No information available.
Viscosity:	No information available.
Molecular Formula:	C ₃ H ₄ N ₂ .
Molecular Weight:	68.08 g/mol.

Section 10- Stability and Reactivity.

Reactive Hazard:	None known, based on information available.
Stability:	Stable under normal condition.
Conditions to Avoid:	Incompatible products. Excess heat. Avoid dust formation. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials:	Strong oxidizing agents, Acids, Acid chlorides, Acid anhydrides.
Hazardous Decomposition Products:	Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Hydrogen cyanide(hydrocyanic acid), Ammonia.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Hazardous Reactions:	None under normal processing.

Section 11- Toxicological Information.

Acute Toxicity

Product Information:

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-Imidazole	970 mg/kg (Rat)	-	-

Toxicologically Synergistic Products: No information available.

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

Irritation: Causes burns by all exposure routes.

Sensitization: No information available.

Carcinogenicity: No information available.

Mutagenic Effects: Not mutagenic in AMES Test.

Reproductive Effects: May cause harm to the unborn child.

Teratogenicity: No information available.

STOT - single exposure: Respiratory system.

STOT - repeated exposure: None known

Aspiration hazard: No information available.

Symptoms / effects, both acute and delayed: No information available.

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

Section 12- Ecological Information.

Ecotoxicity: Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
1-Imidazole	EC50: = 82 mg/L, 96h (Desmodesmus)	Not listed	= 1200 mg/L EC50 Pseudomonas putida17h	EC50: = 341.5mg/L,48h (Daphnia magna)

Persistence and Degradability: Soluble in water Persistence is unlikely.

Bioaccumulation/ Accumulation: No information available.

Mobility: Will likely mobile in the environment due its low water solubility.

Section 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.

Section 14- Transport Information.

DOT

UN-No	UN3263
Proper Shipping Name	Corrosive solid, basic, organic, n.o.s.
Technical Name	1-Imidazole
Hazard Class	8
Packing Group	III

TDG

UN-No	UN3263
Proper Shipping Name	Corrosive solid, basic, organic, n.o.s.
Hazard Class	8
Packing Group	III

IATA

UN-No	UN3263
Proper Shipping Name	Corrosive solid, basic, organic, n.o.s.
Hazard Class	8
Packing Group	III
IMDG/IMO	
UN-No	UN3263
Proper Shipping Name	Corrosive solid, basic, organic, n.o.s.
Hazard Class	8
Packing Group	III

Section 15- Regulatory Information.

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710).

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable.

U.S. Federal Regulations

SARA 313 Not applicable.

SARA 311/312 Hazard Categories See section 2 for more information.

CWA (Clean Water Act) Not applicable.

Clean Air Act Not applicable.

OSHA - Occupational Safety and Health Administration: Not applicable.

CERCLA: Not applicable.

California Proposition 65: This product does not contain any Proposition 65 chemicals.

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.