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

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

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

Immediately call a POISON CENTER or doctor/physician

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 Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

Store in corrosive resistant stainless steel container with a resistant inliner

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

Component	CAS-No	Weight %	
Hydrogen tribromide, compound with pyridine (1:1)	39416-48-3	>90	

4. First-aid measures			
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.		
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.		
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.		
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.		
Most important symptoms/effects	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation		
Notes to Physician	Treat symptomatically		
5. Fire-fighting measures			
Suitable Extinguishing Media	CO 2, dry chemical, dry sand, alcohol-resistant foam.		
Unsuitable Extinguishing Media	No information available		
Flash Point Method -	No information available No information available		
Autoignition Temperature Explosion Limits	No information available		
Upper Lower	No data available No data available		

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO2) Hydrogen halides Bromine

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.

<u>NFPA</u>	Health	Flammability	Instability	Physical hazards	
	3	1	1	N/A	
		6. Accidental rel	ease measures		
Personal P	recautions			ilation. Avoid dust formation. Do	
Environme	vironmental Precautionsnot get in eyes, on skin, or on clothing.vironmental PrecautionsAvoid release to the environment.				
Methods fo Up	r Containment and Cle	ean Sweep up or vacuum up sp formation.	illage and collect in suitable co	ntainer for disposal. Avoid dust	
		7. Handling a	and storage		
Handling			fume hood. Wear personal pro eyes, on skin, or on clothing. Do	ective equipment. Do not breathe	
Storage		Keep containers tightly clos	sed in a dry, cool and well-venti	lated place. Corrosives area.	
8. Exposure controls / personal protection					
Exposure (<u>Guidelines</u>	This product does not conta established by the region s	ain any hazardous materials wi pecific regulatory bodies.	h occupational exposure limits	
Engineerin	g Measures	Use only under a chemical are close to the workstation		sh stations and safety showers	
Personal P	rotective Equipment				
Eye/fac	e Protection		e eyeglasses or chemical safety action regulations in 29 CFR 19		
Skin an	d body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.			
Respira	atory Protection	EN 149. Use a NIOSH/MSI	low the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if posure limits are exceeded or if irritation or other symptoms are experienced.		
Hygien	e Measures	Handle in accordance with	good industrial hygiene and sa	ety practice.	
		9. Physical and ch	emical properties		
Physical S	ate		Solid		

Appearance Odor Odor Threshold pH Melting Point/Range Boiling Point/Range Solid Red brown Odorless No information available No information available 127 - 133 °C / 260.6 - 271.4 °F No information available

Pyridinium bromide perbromide

Flash Point
Evaporation Rate
Flammability (solid,gas)
Flammability or explosive limits
Upper
Lower
Vapor Pressure
Vapor Density
Relative Density
Solubility
Partition coefficient; n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity
Molecular Formula
Molecular Weight

No information available No information available No information available No data available No data available No information available 11.0 No information available No information available No data available

No information available No information available

No information available

C5 H6 Br3 N 319.83 10. Stability and reactivity None known, based on information available Moisture sensitive.

Avoid dust formation. Incompatible products. Excess heat. Exposure to moist air or water. **Conditions to Avoid**

Incompatible Materials Water, Strong oxidizing agents, Strong bases

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen halides, Bromine

Hazardous Polymerization No information available.

None under normal processing. **Hazardous Reactions**

11. Toxicological information

Acute Toxicity

Reactive Hazard

Stability

Product Information	
Oral LD50	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Dermal LD50	Based on ATE data, the classification criteria are not met. ATE $> 2000 \text{ mg/kg}$.
Mist LC50	Based on ATE data, the classification criteria are not met. ATE $> 5 \text{ mg/l}$.
Component Information	
Toxicologically Synergistic	No information available
Products	
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

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Hydrogen tribromide, compound with pyridine (1:1)	39416-48-3	Not listed	Not listed	Not listed	Not listed	Not listed
Mutagenic Effects		No information ava	ailable			
Reproductive Effect	S	No information available.				
Developmental Effect	cts	No information available.				
Teratogenicity		No information ava	ailable.			

STOT - single exposure STOT - repeated exposure

Respiratory system None known

Aspiration hazard

No information available

Symptoms / effects,both acute and delayed

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)

Not applicable

SARA 313

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