

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & MANUFACTURER'S DETAILS	
<i>PRODUCT NAME</i> : Pyridinium bromide perbromide	
MANUFACTURER	
<i>FACTORY & REGISTERED OFFICE:</i> Jubilant Organosys Limited, Bhartiagram, Gajraula District: Jyotiba Phuley Nagar Uttar Pradesh-244223 , India PHONE NO: 91-5924-252353 upto 60 Contact Department-Safety: Extension 298 FAX NO : 91-5924-252352 EMERGENCY PHONE: +91-5924-268141	<i>HEAD OFFICE:</i> Jubilant Organosys Limited Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh-201301 India. PHONE NO: +91-120-2516601 Contact department: EHS FAX NO : +91-120-2516629 Email: support@jubl.com

2. CHEMICAL IDENTIFICATION	
<ul style="list-style-type: none"><i>CHEMICAL NAME</i> : Pyridinium bromide perbromide<i>SYNONYMS</i> : Pyridinium tribromide<i>CHEMICAL CLASSIFICATION</i> : Aromatic Heterocyclic Compound<i>CHEMICAL FORMULA</i> : C₅H₆NBr₃<i>C.A.S. NO.</i> : 39416-48-3	

3. HAZARD IDENTIFICATION & HEALTH HAZARD	
<ul style="list-style-type: none">CorrosiveCauses eye and skin irritation, causes burnsMay cause respiratory and digestive tract irritation with possible burns	

4. FIRST AID MEASURES	
<i>Eye:</i> Immediately flush eyes with plenty of water for at least 30 minutes by separating eyelids with fingers. Do not allow victim to rub or keep eyes close. Get medical help immediately.	
<i>Skin:</i> Remove contaminated clothings and shoes. Flush skin with copious amount of water for atleast fifteen minutes. Wash contaminated clothing before reuse. Call for immediate medical help.	
<i>Inhalation:</i>	

Remove the affected person (s) to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation

Ingestion:

If swallowed, wash mouth with water if conscious. Call a physician. Do not induce vomiting. Make the victim drink water/ milk.

5. FIRE FIGHTING MEASURES

Extinguishing media:

Dry chemical powder, carbon dioxide
Do not use water or foam

Special fire fighting procedure:

Wear protective clothing, wear self contained breathing apparatus. Vapors are heavier than air and can spread on the ground and get accumulated in confined places.

Unusual fire and explosion hazard:

Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

- Evacuate the area.
- Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves
- Cover with dry lime or soda ash, pick up and keep in closed container for disposal
- Ventilate the area and wash spill site after material is picked up.

7. HANDLING AND STORAGE

- Store in cool dry area away from incompatible substances
- Keep containers closed.
- Keep in well ventilated area
- Avoid raising dust
- Handling – As per section 8

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Avoid contact with eyes, skin and clothing
- Wash thoroughly after handling
- Wear appropriate NIOSH/MSHA approved respirator, chemical resistant gloves/safety goggles and protective clothing
- In case of contact use safety showers and eye bath for washing
- Use only in a chemical fume hood
- Do not breathe dust
- Use faceshield (8" minimum)

9. PHYSICOCHEMICAL PROPERTIES & FIRE/ EXPLOSION HAZARD DATA

PHYSICAL STATE	: Solid
APPEARANCE	: Red to brown
BOILING POINT	: Not available
MELTING POINT	: 130-135 °C
FLASH POINT	: Data not relevant
VAPOUR PRESSURE	: Data not relevant
SPECIFIC GRAVITY (WATER=1)	:
VAPOR DENSITY (AIR=1)	: 11
SOLUBILITY IN WATER	: Decomposes
FLAMMABILITY	: Not Flammable
UEL	: Not applicable
LEL	: Not applicable
AUTO IGNITION TEMPERATURE	: Not applicable
EXPLOSIVE SENSITIVITY TO IMPACTS	: Data not available
EXPLOSIVE SENSITIVITY TO STATIC ELECTRICITY	: Data not available
COMBUSTIBLE LIQUID	: No
FLAMMABLE MATERIAL	: No
PYROPHORIC MATERIAL	: No
EXPLOSIVE MATERIAL	: No
OXIDISER	: No
ORGANIC PEROXIDE	: No
CORROSIVE MATERIAL	: Yes
MOLECULAR WEIGHT	: 319.8

10. STABILITY AND REACTIVITY

- Stable under normal temperature & pressures, may decompose on exposure to moist air or water.
- Incompatible with
Strong oxidizing agents, excess heat, strong bases
- Hazardous combustion or decomposition products:
thermal decomposition may produce bromine fumes, Hydrogen bromide, oxides of nitrogen, irritating and toxic fumes and gases

11. TOXICOLOGICAL INFORMATION

- **Acute effects:**
May be harmful if swallowed, inhaled or absorbed through skin.
Material is extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes and skin.
- **Toxicity:**
Data not available
- **Carcinogenicity:**

11. TOXICOLOGICAL INFORMATION

Not list by ACGIH, IARC, NIOSH, NTP or OSHA

RTCES # : Not listed

12. ECOLOGICAL INFORMATION

- **Ecotoxicity:** Data not available
- **Environmental:** Do not allow to enter waters, waste waters or soil

13. DISPOSAL CONSIDERATION

- Dissolve/mix with a combustible liquid and burn in a chemical incinerator equipped with an afterburner and scrubber.
- Observe all federal, state and local environmental regulations

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME	:	Corrosive, Solid, acidic, n.o.s (Pyridinium bromide perbromide)
UN/ID NUMBER	:	UN 3261
UN HAZARD CLASS	:	8
UN PACKING GROUP	:	II

15. REGULATORY INFORMATION

European information

- EC NO. : 254-446-8
- R-34 (causes burns)
- R-36/37(irritating to eyes, respiratory system)
- S-26 (in case of contact with eyes, rinse immediately with plenty of water and seek medical advice)
- S-28 (after contact with skin, wash immediately with plenty of water)
- S-27 (take off immediately all contaminated clothing)
- S-36/37/39 (wear suitable protective clothings, gloves, eyes/face)

US information

- Is listed in EPA TSCA chemical inventory.
- None of the chemicals in this product are listed under TSCA section 12b
- None of the chemicals in this product have a TPQ, RQ under SARA Section 302.
- None of the chemicals in this product are reported under SARA Section 313
- None of the chemicals in this product contain any class1 & class2 ozone depletors , neither contain any hazardous air pollutants under 'Clean Air Act'
- None of the chemicals in this product are listed as Hazardous substances or priority pollutants or

15. REGULATORY INFORMATION

Toxic substances list under 'Clean Water Act'

16. OTHER INFORMATION

Information contained in this MSDS is believed to be correct but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. This MSDS shall be used as a guide only. JUBILANT ORGANOSYS LIMITED makes no warranties expressed or implied of the adequacy of this document for any particular purpose.

Document Name: 0043A05 Div 05 msds Pyridinium bromide perbromide

Date: 11-Oct-04

Revision Number: 05