### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

### 1 Identification

· Product identifier

· Trade name: Pyridine hydrobromide perbromide

· Article number: 140975

• CAS Number: 39416-48-3 • EC number: 254-446-8

· Application of the substance / the mixture Laboratory chemicals for research and development

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

BeanTown Chemical 9 Sagamore Park Road Hudson, NH 03051 USA

Phone: (603) 402-2234 Fax: (603) 402-9713

Email: technical@beantownchem.com

www.beantownchem.com

- · Information department: Technical Support Department
- · Emergency telephone number:

During normal operating hours, please call (603) 402-2234 After hours, please call Chemtrec at (800) 424-9300

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

Pyridine hydrobromide perbromide

· Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dusts or mists.

(Contd. on page 2)

### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

Trade name: Pyridine hydrobromide perbromide

(Contd. of page 1)

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

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/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 39416-48-3 Pyridine hydrobromide perbromide
- · Identification number(s)
- · EC number: 254-446-8

#### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

(Contd. on page 3)

### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

Trade name: Pyridine hydrobromide perbromide

(Contd. of page 2)

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

· Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

Trade name: Pyridine hydrobromide perbromide

· Eve protection: Tightly sealed goggles

(Contd. of page 3)

9 Physical	l and c	hemical	l prop	erties
------------	---------	---------	--------	--------

· Information or	hasic	nhysical	and chamic	al nuonautias
- iniormation or	i Dasic	nnvsicai	ana cnemic	u properues

· General Information

· Appearance:

Form: Crystalline Not determined.

Odor: Pungent, makes eyes water

· Odour threshold: Not determined. · pH-value: Not determined.

\_\_\_\_\_

· Change in condition Melting point/Melting range:

128-136 °C (262-277 °F)

Boiling point/Boiling range: Undetermined

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

Ignition temperature:

**Decomposition temperature:** Not determined.

· Auto igniting: Not determined.

• Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower:Not determined.Upper:Not determined.

· Vapor pressure: Not determined.

Density: Not determined.
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic:Not determined.Kinematic:Not determined.

Organic solvents: 0.0 %

• Other information No further relevant information available.

### 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.

(Contd. on page 5)

### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

Trade name: Pyridine hydrobromide perbromide

(Contd. of page 4)

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Strong caustic effect on skin and mucous membranes.
- on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Carcinogenic categories

#### · IARC (International Agency for Research on Cancer)

Substance is not listed.

### · NTP (National Toxicology Program)

Substance is not listed.

#### · OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)

### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

Trade name: Pyridine hydrobromide perbromide

(Contd. of page 5)

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

UN-Number		
DOT, IMDG, IATA	UN3261	
UN proper shipping name		
DOT	Corrosive solid, acidic, organic, n.o.s.	
IMDG, IATA	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	
Transport hazard class(es)		
DOT, IMDG, IATA		
Class	8 Corrosive substances	
Packing group		
DOT, IMDG, IATA	III	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Warning: Corrosive substances	
Transport in bulk according to Annex	II of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	UN3261, Corrosive solid, acidic, organic, n.o.s., 8, III	

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

(Contd. on page 7)

### acc. to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Printing date 03/03/2015 Reviewed on 11/24/2014

Trade name: Pyridine hydrobromide perbromide

(Contd. of page 6)

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· RTECS

Substance is not listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· NFPA ratings (scale 0-4)

Health = 4

Fire = 0

Reactivity = 0

· HMIS ratings (scale 0-4)

Health = 4

Fire = 0

Reactivity = 0

- · Department issuing SDS: Technical Support Department
- · Contact: Technical Support Department
- · Date of preparation / last revision 03/03/2015 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

USA