



SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/26/2018

Revision Date 02/26/2018

1 Identification of the Substance/Mixture and Company

Product Name: Periodic Acid, Reagent

SDS Code: SSSPP03

CAS Number:

10450-60-9

EC number:

233-937-0

Product Description: Laboratory Reagent

Manufacturer/Supplier:

American MasterTech

1330 Thurman Street

Lodi, CA 95240

USA

(800) 860-4073

European Authorized Representative:

Emergo Europe

Prinsessegracht 20

2514 AP The Hague,

The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



GHS03 Flame over circle

Ox. Sol. 2 H272 May intensify fire; oxidizer.



GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 2 H310 Fatal in contact with skin.

Acute Tox. 2 H330 Fatal if inhaled.



GHS05 Corrosion

Skin Corr. 1B 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).

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Product Name: Periodic Acid, Reagent

Hazard pictograms

GHS03 GHS05 GHS06

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

orthoperiodic acid

Hazard statements

May intensify fire; oxidizer.

Fatal if swallowed, in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

Precautionary statements

Keep away from heat.

Keep/Store away from clothing/combustible materials.

Take any precaution to avoid mixing with combustibles.

Do not breathe dusts or mists.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Immediately call a poison center/doctor.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment is urgent (see on this label).

Take off immediately all contaminated clothing and wash it before reuse.

In case of fire: Use for extinction: CO₂, powder or water spray.

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

Store locked up.

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

Classification system:**NFPA ratings (scale 0 - 4)**

Health = 4

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = *4

Fire = 0

Reactivity = 0

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

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3 Composition

Chemical characterization: Substances**CAS No. Description**

10450-60-9 orthoperiodic acid

Identification number(s)**EC number:** 233-937-0

4 First Aid Measures

Description of first aid measures**General information:**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation:

Supply fresh air or oxygen; call for doctor.

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:**

Do not induce vomiting; immediately call for medical help.

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 Firefighting Measures

Extinguishing media**Suitable extinguishing agents:** Use fire fighting measures that suit the environment.**Special hazards arising from the substance or mixture:** During heating or in case of fire poisonous gases are produced.**Advice for firefighters****Protective equipment:** Mouth respiratory protective device.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.**Methods and material for containment and cleaning up:**

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

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Product Name: Periodic Acid, Reagent
Protective Action Criteria for Chemicals

PAC-1:	
	0.18 mg/m ³
PAC-2:	
	2.1 mg/m ³
PAC-3:	
	12 mg/m ³

7 Handling and Storage

Handling:
Precautions for safe handling:

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Information about protection against explosions and fires: Keep respiratory protective device available.

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: No further data; see item 7.

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.

Store protective clothing separately.

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

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Product Name: Periodic Acid, Reagent
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.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

Information on basic physical and chemical properties
General Information
Appearance

Form:	Crystalline
Color:	White
Odor:	Nearly odorless
Odor threshold:	Not determined.

pH-value: Not applicable.

Change in condition

Melting point/Melting range:	122 °C (251.6 °F)
Boiling point/Boiling range:	Undetermined.

Flash point: Not applicable.

Flammability (solid, gaseous): Product is not flammable.

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 applicable.

Density at 20 °C (68 °F): 1.4 g/cm³ (11.683 lbs/gal)

Relative density: Not determined.

Vapour density: Not applicable.

Evaporation rate: Not applicable.

Solubility in / Miscibility with

Water at 20 °C (68 °F): 2430 g/l

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

Dynamic: Not applicable.

Kinematic: Not applicable.

Other information: No further relevant information available.

10 Stability and Reactivity

Reactivity: No further relevant information available.

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Chemical stability:**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Possibility of hazardous reactions:** No dangerous reactions known.**Conditions to avoid:** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects**Acute toxicity:****Primary irritant effect:****On the skin:** 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:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects:** No further relevant information available.

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13 Disposal Considerations

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

UN-Number	UN3085
DOT, ADR, IMDG, IATA	
ADN	Not applicable
UN proper shipping name	
DOT	Oxidizing solid, corrosive, n.o.s.
ADR	3085 Oxidizing solid, corrosive, n.o.s. (orthoperiodic acid)
ADN	Not applicable
IMDG	OXIDIZING SOLID, CORROSIVE, N.O.S.
IATA	OXIDIZING SOLID, CORROSIVE, N.O.S. (orthoperiodic acid)
Transport hazard class(es)	
DOT	
	
Class	5.1 Oxidizing substances
ADR, ADN	
Class	Not applicable
IMDG, IATA	
	
Class	5.1 Oxidizing substances
Packing group	
DOT, IMDG, IATA	III
ADR	Not applicable
Environmental hazards	Not applicable.
Special precautions for user:	Not applicable.
EMS Number:	F-A,S-Q
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
UN "Model Regulation":	Not applicable

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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.

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.

GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms


GHS03 GHS05 GHS06

Signal word Danger

Hazard-determining components of labeling:

orthoperiodic acid

Hazard statements

May intensify fire; oxidizer.

Fatal if swallowed, in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

Precautionary statements

Keep away from heat.

Keep/Store away from clothing/combustible materials.

Take any precaution to avoid mixing with combustibles.

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Do not breathe dusts or mists.
 Do not get in eyes, on skin, or on clothing.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/protective clothing/eye protection/face protection.
 [In case of inadequate ventilation] wear respiratory protection.
 If swallowed: Immediately call a poison center/doctor.
 If swallowed: Rinse mouth. Do NOT induce vomiting.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment is urgent (see on this label).
 Take off immediately all contaminated clothing and wash it before reuse.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 02/26/2018 / -

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)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 Ox. Sol. 2: Oxidizing solids – Category 2
 Acute Tox. 2: Acute toxicity – Category 2
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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