



MATERIAL SAFETY DATA SHEET

according to the Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 08/27/2012

Version 1.1

SECTION 1. Identification

Product identifier

| | |
|----------------|--|
| Product number | 105040 |
| Product name | Potassium iodide suitable for use as an active pharmaceutical ingredient EMPROVE® api Ph Eur,BP,JP,USP |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|-----------------|--|
| Identified uses | Pharmaceutical production, Cosmetic raw material |
|-----------------|--|

Details of the supplier of the safety data sheet

| | |
|---------|--|
| Company | EMD Millipore Corporation 290 Concord Road, Billerica, MA 01821, United States of America SDS Phone Support: +1-978-715-1335 General Inquiries: +1-978-751-4321 Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5) e-mail: mm_sds@merckgroup.com |
|---------|--|

| | |
|---------------------|--|
| Emergency telephone | 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week |
|---------------------|--|

SECTION 2. Hazards identification

GHS-Labeling

Not a dangerous substance according to GHS.

OSHA Hazards

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

Other hazards

None known.

SECTION 3. Composition/information on ingredients

| | | |
|------------|--------------|-----------|
| Formula | KI | IK (Hill) |
| CAS-No. | 7681-11-0 | |
| Molar mass | 166.00 g/mol | |

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Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

Potassium iodide (<= 100 %)

7681-11-0

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

After skin contact: wash off with plenty of water. Remove contaminated clothing.

Eye contact

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

agitation, Vomiting, paralysis symptoms

The following applies to iodides in general: Sensitization possible in predisposed persons.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

Fire may cause evolution of:

hydrogen iodide

Advice for firefighters

Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

Environmental precautions

Do not empty into drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Protected from light.

Store at +5°C to +30°C (+41°F to +86°F).

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Ingredients

| Basis | Value | Threshold limits | Remarks |
|-----------------------------------|------------------------------|------------------|---|
| <i>Potassium iodide 7681-11-0</i> | | | |
| ACGIH | Time Weighted Average (TWA): | 0.01 ppm | Form of exposure: Inhalable fraction and vapor. |

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection

Safety glasses

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Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Recommended:

full contact:

| | |
|---------------------|----------------|
| Glove material: | Nitrile rubber |
| Glove thickness: | 0.11 mm |
| Break through time: | > 480 min |

splash contact:

| | |
|---------------------|----------------|
| Glove material: | Nitrile rubber |
| Glove thickness: | 0.11 mm |
| Break through time: | > 480 min |

Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

| | |
|-----------------------------|--|
| Physical state | solid |
| Color | off-white |
| Odor | odorless |
| Odor Threshold | not applicable |
| pH | ca. 6.9 at 50 g/l 68 °F (20 °C) |
| Melting point | 1333 °F (723 °C) |
| Boiling point/boiling range | 2,417 °F (1,325 °C) at 1,013 hPa |
| Flash point | does not flash |
| Evaporation rate | No information available. |
| Flammability (solid, gas) | No information available. |
| Lower explosion limit | No information available. |
| Upper explosion limit | No information available. |

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| | |
|--|---|
| Vapor pressure | No information available. |
| Relative vapor density | No information available. |
| Relative density | 3.13 g/cm ³ at 68 °F (20 °C) |
| Water solubility | 1,430 g/l at 68 °F (20 °C) |
| Partition coefficient: n- octanol/water | No information available. |
| Autoignition temperature | No information available. |
| Decomposition temperature | No information available. |
| Viscosity, dynamic | No information available. |
| Bulk density | ca. 1,500 kg/m ³ |

SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

Sensitivity to light

Possibility of hazardous reactions

Risk of explosion with:

Alkali metals, Ammonia, halogen-halogen compounds, hydrogen peroxide, perchloryl fluoride

Exothermic reaction with:

Oxidizing agents

Risk of ignition or formation of inflammable gases or vapors with:

Fluorine

Conditions to avoid

no information available

Incompatible materials

no information available

Hazardous decomposition products

in the event of fire: See section 5.

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SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Acute oral toxicity

LD50 rat: 2,779 mg/kg (own results)

absorption

Acute dermal toxicity

absorption

Eye irritation

rabbit

Result: slight irritation

(HSDB)

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

(Lit.)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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Further information

Further toxicological data:

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

After absorption of toxic quantities:

drop in blood pressure, paralysis symptoms, agitation, Vomiting

Other information

The following applies to iodides in general: Sensitization possible in predisposed persons.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to fish

LC50 *Oncorhynchus mykiss* (rainbow trout): 8,960 mg/l; 96 h (ECOTOX Database)

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Other adverse effects

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

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SECTION 15. Regulatory information

United States of America

OSHA Hazards

Respiratory irritant

This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS, and may deviate from the GHS information on the label and in section 2.

SARA 311/312 Hazards

Acute Health Hazard

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Ingredients

Potassium iodide

New Jersey Right To Know

Ingredients

Potassium iodide

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

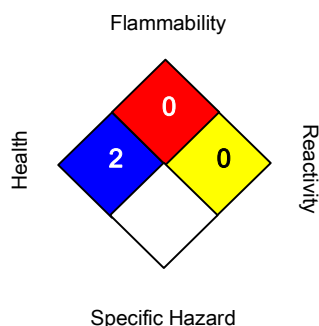
Notification status

TSCA: On TSCA Inventory

DSL: All components of this product are on the Canadian DSL.

SECTION 16. Other information

National Fire Protection Association (U.S.A)



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Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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