

Revision Date 25-Oct-2011

Revision Number 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Mercury(II) bromide
Cat No. 448120000; 448121000
Synonyms Mercuric bromide

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

| Acute oral toxicity | Category 2 |
|---|------------|
| Acute dermal toxicity | Category 1 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 2 |
| Specific target organ systemic toxicity (repeated exposure) | Category 2 |
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) T+ - Very toxic

N - Dangerous for the environment R33 - Danger of cumulative effects

R-phrase(s)R33 - Danger of cumulative effects
Risk Combination Phrases
R26/27/28 - Very toxic by inhalation, i

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment



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2. HAZARDS IDENTIFICATION



Signal Word

Danger

Hazard Statements

H310 - Fatal in contact with skin

H300 - Fatal if swallowed

H330 - Fatal if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water

P310 - Immediately call a POISON CENTER or doctor/ physician

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P273 - Avoid release to the environment

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | EC-No. | Weight % | CAS-No | Classification | GHS Classification | REACH No. |
|-------------------------------|-----------------------|----------|-----------|------------------|---|-----------|
| Mercuric bromide 7789-47-1 | EEC No. 232- 169-3 | >95 | 7789-47-1 | R33 N; R50-53 | Acute Tox. 2 (H330) Acute Tox. 2 (H300) Acute Tox. 1 (H310) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | - |



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For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the

eyelids, for at least 15 minutes.

Skin ContactWash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Immediate medical attention is required.

Ingestion Call a physician immediately. Clean mouth with water.

Inhalation Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not

breathing, give artificial respiration. Immediate medical attention is required.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up



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Wear self-contained breathing apparatus and protective suit. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use only in area provided with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep locked-up.

Specific End Uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits Component

Mercuric bromide

| European Union | The United Kingdom | France | Belgium | Spain |
|----------------|--------------------|------------------------------|---------|-----------------------------------|
| | | VME: 0.1 mg/m ³ 8 | | Skin |
| | | heures. Hg | | VLA-ED: 0.025 mg/m ³ 8 |
| | | Skin | | horas |

Component Mercuric bromide

| Italy | Germany | Portugal | The Netherlands | Finland |
|-------|-------------------------------|--------------------------------|-----------------|---------|
| | MAK: 0.02 mg/m ³ 8 | TWA: 0.025 mg/m ³ 8 | | |
| | Stunden. inhalable | horas | | |
| | fraction | Skin | | |
| | Skin | | | |
| | Peak: 0.16 mg/m ³ | | | |
| | TWA: 0.1 mg/m ³ 8 | | | |
| | Stunden. inhalable | | | |
| | fraction exposure factor | | | |
| | 8 | | | |

ComponentMercuric bromide

| Austria | Denmark | Switzerland | Poland | Norway |
|--------------------------------|---------|--------------------------------|--------|-------------------------------|
| Skin | | STEL: 0.8 mg/m ³ 15 | | TWA: 0.02 mg/m ³ 8 |
| STEL: 0.4 mg/m ³ 15 | | Minuten | | timer |
| Minuten | | MAK: 0.1 mg/m ³ 8 | | |
| MAK: 0.1 mg/m ³ 8 | | Stunden | | |
| Stunden | | | | |

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available. No information available.

(PNEC)



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Ensure adequate ventilation, especially in confined areas

Exposure controls

Engineering Measures

Personal protective equipment

Goggles

Eve Protection Hand Protection

Protective gloves

Skin and body protection **Respiratory Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN

149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Powder, Solid **Physical State Appearance** White

odor рΗ

Boiling Point/Range Melting Point/Range

Flash Point **Autoignition Temperature**

Water Solubility

Specific Gravity Molecular Formula **Molecular Weight**

odorless

No information available.

322°C / 611.6°F 236°C / 456.8°F

No information available. No information available.

0.6a/100ml (25 C)

6.1090 Br2 Hg 360.4

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Light sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization No information available. **Hazardous Reactions.** No information available.

Conditions to Avoid

Exposure to light, Incompatible products.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products



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Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen halides.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product InformationToxic by inhalation, in contact with skin and if swallowed

Component Information

ComponentLD50 OralLD50 DermalLC50 InhalationMercuric bromide40 mg/kg (Rat)100 mg/kg (Rat)

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

SensitizationNo information available.Mutagenic EffectsNo information availableReproductive EffectsNo information available.Developmental EffectsNo information available.Target OrgansNo information available.

Other Adverse Effects See actual entry in RTECS for complete information

Endocrine Disruptor Information None known

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects Do not empty into drains

Persistence and degradability

No information available

Bioaccumulative potential

No information available.



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Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused

Products

Dispose of in accordance with local regulations

Empty containers should be taken to local recyclers for disposal **Contaminated Packaging**

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 1634 **Hazard Class** 6.1

Packing Group

Proper Shipping Name MERCURY BROMIDES

ADR

UN-No 1634 **Hazard Class** 6.1 **Packing Group** Ш

Proper Shipping Name MERCURY BROMIDES

IATA

UN-No 1634 **Hazard Class** 6.1 **Packing Group**

Proper Shipping Name MERCURY BROMIDES

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories



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| Component | EINECS | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | CHINA | AICS | KECL |
|------------------|-----------|--------|-----|------|-----|------|-------|------|-------|------|------|
| Mercuric bromide | 232-169-3 | - | | Χ | Χ | - | Χ | ı | Χ | Χ | X |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R33 - Danger of cumulative effects

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date 25-Oct-2011 Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet