

## MATERIAL SAFETY DATA SHEET

Buffer solution pH 4 (phthalate) traceable to NIST

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Buffer solution pH 4 (phthalate) traceable to NIST

**Catalog Numbers:** 38383-0000, 38383-0010, 38383-5000, 38396-0000, 38396-0010

**Synonyms:**

**Company Identification:** Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

**Company Identification: (USA)** Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**For information in the US, call:** 800-ACROS-01

**For information in Europe, call:** +32 14 57 52 11

**Emergency Number, Europe:** +32 14 57 52 99

**Emergency Number US:** 201-796-7100

**CHEMTREC Phone Number, US:** 800-424-9300

**CHEMTREC Phone Number, Europe:** 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
877-24-7	Potassium hydrogen phthalate	1.0%	212-889-4		
7487-94-7	Mercuric chloride	0.001%	231-299-8	T+ N	28 34 48/24/25 50/53
7732-18-5	Water	Balance	231-791-2		

Text for R-phrases: see Section 16

**Hazard Symbols:** None listed**Risk Phrases:** None listed

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

*Not available*

## Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:**

#### Section 4 - First Aid Measures

<b>Eyes:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<b>Skin:</b>	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Ingestion:</b>	Get medical aid. Wash mouth out with water.
<b>Inhalation:</b>	Remove from exposure and move to fresh air immediately.
<b>Notes to Physician:</b>	Treat symptomatically and supportively.

#### Section 5 - Fire Fighting Measures

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
<b>Extinguishing Media:</b>	Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

#### Section 6 - Accidental Release Measures

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

#### Section 7 - Handling and Storage

<b>Handling:</b>	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.
<b>Storage:</b>	Store in a cool, dry place. Store in a tightly closed container.

#### Section 8 - Exposure Controls, Personal Protection

##### Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

##### Exposure Limits

CAS# 877-24-7:

CAS# 7487-94-7:

Belgium - TWA: (mercury inorganic compounds): 0.025 mg/m<sup>3</sup> VLE (as Hg)

France - VME: (mercury inorganic compounds): 0.1 mg/m<sup>3</sup> VME (as Hg)

Germany: (mercury inorganic compounds): 0.1 mg/m<sup>3</sup> VME (as Hg) Germany: (mercury inorganic compounds): skin notation

Malaysia: (mercury inorganic compounds): 0.025 mg/m<sup>3</sup> TWA (as Hg)

Netherlands: (mercury inorganic compounds): 0.15 mg/m<sup>3</sup> STEL Netherlands: (mercury inorganic compounds): 0.05 mg/m<sup>3</sup> MAC

Russia: (mercury inorganic compounds): 0.005 mg/m<sup>3</sup> TWA (aerosol, as Hg)

Spain: (mercury inorganic compounds): 0.025 mg/m<sup>3</sup> VLA-ED (as Hg)

CAS# 7732-18-5:

##### Personal Protective Equipment

<b>Eyes:</b>	Wear chemical splash goggles.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** 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.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Color:** clear colorless  
**Odor:** odorless  
**pH:** 4.0  
**Vapor Pressure:** Not available  
**Viscosity:** Not available  
**Boiling Point:** Not available  
**Freezing/Melting Point:** Not available  
**Autoignition Temperature:** Not available  
**Flash Point:** Not available  
**Explosion Limits: Lower:** Not available  
**Explosion Limits: Upper:** Not available  
**Decomposition Temperature:** Not available  
**Solubility in water:** Miscible  
**Specific Gravity/Density:**  
**Molecular Formula:**  
**Molecular Weight:** 0

## Section 10 - Stability and Reactivity

<b>Chemical Stability:</b>	Stable.
<b>Conditions to Avoid:</b>	Not available
<b>Incompatibilities with Other Materials</b>	Not available
<b>Hazardous Decomposition Products</b>	Not available
<b>Hazardous Polymerization</b>	Will not occur.

## Section 11 - Toxicological Information

**RTECS#:** CAS# 877-24-7: CZ4326000  
CAS# 7487-94-7: OV9100000  
CAS# 7732-18-5: ZC0110000

**LD50/LC50:** RTECS:  
**CAS# 877-24-7:** Dermal, guinea pig: LD50 = >1 gm/kg;  
Oral, rat: LD50 = >3200 mg/kg;  
. RTECS:  
**CAS# 7487-94-7:** Draize test, rabbit, eye: 50 ug/24H Severe;  
Draize test, rabbit, skin: 500 mg/24H Severe;  
Oral, mouse: LD50 = 6 mg/kg;  
Oral, rat: LD50 = 1 mg/kg;  
Skin, rat: LD50 = 41 mg/kg;  
. RTECS:  
**CAS# 7732-18-5:** Oral, rat: LD50 = >90 mL/kg;  
.

**Carcinogenicity:** Potassium hydrogen phthalate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Mercuric chloride - IARC: Group 3 (not classifiable)  
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Other:** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

Not available

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	Not regulated as a hazardous material	Not regulated as a hazardous material	Not regulated as a hazardous material
<b>Hazard Class:</b>			
<b>UN Number:</b>			
<b>Packing Group:</b>			

### Section 15 - Regulatory Information

#### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 877-24-7: Not available

CAS# 7487-94-7: 3

CAS# 7732-18-5: Not available

Canada

CAS# 877-24-7 is listed on Canada's DSL List

CAS# 7487-94-7 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

#### US Federal

TSCA

CAS# 877-24-7 is listed on the TSCA Inventory.

CAS# 7487-94-7 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

### Section 16 - Other Information

#### Text for R-phrases from Section 2

R 28 Very toxic if swallowed.

R 34 Causes burns.

R 48/24/25 Toxic : danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**MSDS Creation Date:** 11/08/2004

**Revision #0 Date** Original.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*

-----