## SECTION 1: IDENTIFICATION

**1.1 Product identifier**

| | |
|---|---|
| Product Name | Post-Process B |

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

| | |
|---|---|
| Identified uses | For research use only. Not for diagnostic use. |

**1.3 Details of the supplier of the data sheet**

| | |
|---|---|
| Company | Molecular Instruments, Inc.<br>5015 Eagle Rock Blvd Suite 301<br>Los Angeles, CA 90041 |
| Telephone | +1 626 210 2600 |

## SECTION 2. HAZARDS IDENTIFICATION

This safety data sheet complies with the requirements of Regulation EC 1907/2006.

**2.1 Classification of the substance or mixture**

**GHS Classification**

Health Hazards

| | |
|---|---|
| Acute toxicity, Oral | Category 2 |
| Acute toxicity, Dermal | Category 1 |
| Acute toxicity, Inhalation – Dusts and Mists | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Short-term (acute) aquatic hazard | Category 2 |
| Long-term (chronic) aquatic hazard | Category 3 |

**2.2 Label elements including precautionary statements**

Signal Word: Danger

Hazard Statements

| | |
|---|---|
| H300+H310+H330 | Fatal if swallowed, in contact with skin or if inhaled. |
| H318 | Causes serious eye damage. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H401+H412 | Toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P280 | Wear eye/face protection. |

| | |
|---|---|
| P301+P312+P330 | If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. |
| P301+P330+P331 | If swallowed: Rinse mouth. Do not induce vomiting. |
| P303+P361+P353 | If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340+P310 | If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. |
| P305+P351+P338+ P310 | 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. |

### 2.3 Other hazards

None.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Chemical Characterization

Mixtures.

### 3.2 Dangerous Components

| Chemical Name | CAS No | EINECS No | Index No | Weight % |
|---|---|---|---|---|
| Hydrogen peroxide | 7722-84-1 | - | - | 1-3 |
| Sodium azide | 26628-22-8 | 247-852-1 | - | 0.5-1 |

## SECTION 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

| | |
|---|---|
| General information | If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Inhalation | Move to fresh air. Consult a physician if necessary. If not breathing, give artificial respiration. |
| Ingestion | Rinse mouth and drink plenty of water. Consult a physician. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician or poison control center immediately. |
| Skin Contact | Rinse immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing. Get medical attention if symptoms occur. |

| | |
|---|---|
| Eye Contact | Rinse immediately with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Remove contact lenses if present. Consult a physician. |

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in Section 2.2 and/or in Section 11.

**4.3 Indication of any immediate medical attention and special treatment needed.**

Treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES

| | |
|---|---|
| **5.1 Extinguishing Media** | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use high volume water jet. |
| **5.2 Special hazards** | Do not allow run-off from fire fighting to enter drains or water courses. |
| **5.3 Advice for fire fighters** | Wear self-contained breathing apparatus and protective suit. |
| **5.4 Further information** | Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors and/or aerosols. Do not use steel or aluminum tools or equipment. Avoid substance contact. Avoid dust formation. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

**6.2 Environmental Precautions**

Should not be released into the environment. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and clean up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see Sections 7 and 10). Take up with liquid-absorbent and neutralizing material. Dispose of properly. Avoid dust formation. Clean up affected area.

**6.4 Reference to other sections**

Wear personal protective equipment as described in Section 8 of the safety data sheet.

## SECTION 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**

Provide good ventilation in the process area. Always wear recommended personal protective equipment. Avoid contact with skin, eyes, and clothing.

**7.2 Conditions for safe storage, including any incompatibles**

Store at 2-8°C under sterile conditions. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from food and drink.

**7.3 Specific end use(s)**

For research use only.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

Workplace Exposure Limits (WEL)

| Chemical Name | Cas No | Value | Control Parameters | Basis |
|---|---|---|---|---|
| Hydrogen peroxide | 7722-84-1 | TWA | 1 ppm | ACGIH |
| | | TWA | 1 ppm<br>1.4 mg/m$^3$ | NIOSH REL |
| | | TWA | 1 ppm<br>1.4 mg/m$^3$ | OSHA |
| Sodium azide | 26628-22-8 | TWA | 0.11 ppm<br>0.29 mg/m$^3$ | ACGIH |
| | | TWA | 0.1 ppm<br>0.3 mg/m$^3$ | OSHA PEL |
| | | TWA | 0.1 ppm<br>0.3 mg/m$^3$ | NIOSH |

**8.2 Exposure controls**

| | |
|---|---|
| Personal Protective Equipment | Wear protective gloves/protective clothing and eye/face protection. Only wear fitting, comfortable, and clean protective clothing. |
| Respiratory Protection | With correct and proper use, and under normal conditions, breathing protection is not required. |
| Hand Protection | Tested protective gloves are to be worn: DIN-/EN-Norms: EN ISO 374. |
| Eye Protection | Tightly sealed safety glasses. |
| Skin and Body Protection | Wear suitable protective clothing. |
| Environmental exposure controls | Refer to Section 6. No further action is necessary. |

Environmental Exposure Controls

Should not be released in the environment. Prevent product from entering drains.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**
Appearance: Liquid.

**9.2 Other information**
Not available.

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
Has a fire-promoting effect due to release of oxygen.

**10.2 Stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No known hazardous reactions.

**10.4 Conditions to avoid**
Exposure to light and heat.

**10.5 Incompatible materials**
No data available.

**10.6 Hazardous decomposition products**
No data available.

## SECTION 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Toxicological information**
Acute Toxicity

| Chemical Name | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LD50 (inhalation, rat/mouse) |
|---|---|---|---|
| Hydrogen peroxide | 693.7 mg/kg | > 2000 mg/kg | 11.1 mg/L (vapor; 4h) |
| Sodium azide | 27 mg/kg | 20 mg/kg | 0.054-0.52 mg/L (dust) |

Principle Routes of exposure
Potential Health Effects

| | |
|---|---|
| Inhalation | May be harmful if inhaled. |
| Ingestion | May be harmful if swallowed. |
| Skin contact | Frequently or prolonged contact with skin may cause dermal irritation. |
| Eye contact | May cause eye irritation in susceptible persons. |
| Carcinogenetic effects | None. |
| Mutagenic effects | No data available. |

| | |
|---|---|
| Reproductive toxicity | No data available. |
| Sensitization | No data available. |
| Target organ effects | No data available. |
| Other adverse effect | No data available. |

## SECTION 12. ECOLOGICAL INFORMATION

**12.1 Ecotoxicity**

| Chemical Name | Freshwater Algae Data | Water Flea Data | Freshwater Fish Species Data |
|---|---|---|---|
| Hydrogen peroxide | ErC50: 1.38 mg/L (72 h) (S. costatum) NOEC: 0.63 mg/L (72 h) (S. costatum) | NOEC: 0.63 mg/L (21 d) (D. magna) | LC50: 16.4 mg/L (96 h) (P. promelas) |
| Sodium azide | - | - | LC50: 0.7 mg/L (96 h) (L. macrochirus) LC50: 0.8 mg/L (96 h) (O. mykiss) LC50: 5.46 mg/L (96 h) (P. promelas) |

**12.2 Persistence and degradability**

**Components:**
**Hydrogen peroxide:**

| | |
|---|---|
| Biodegradability: | Aerobic<br>Inoculum: activated sludge<br>Result: Readily biodegradable<br>Biodegradation: > 99%<br>Exposure time: 0.5 h<br>GLP: Yes<br>Remarks: (ECHA) |

**12.3 Bioaccumulation potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Other adverse effects**

Avoid discharge into the environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

Avoid release into the environment. Disposal of contents and containers must comply with all requirements of local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

## SECTION 14. TRANSPORT INFORMATION

**IATA/ADR/DOT-US/IMDG**

Not dangerous goods. Not regulated by transport regulations.

**14.1 UN number** Not applicable

**14.2 UN proper shipping name** Not applicable

**14.3 Transport hazard class(es)** Not applicable

**14.4 Packaging group** Not applicable

**14.5 Environmental hazards** Not applicable

## SECTION 15. REGULATORY INFORMATION

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

**US Federal Regulations**

**SARA 311/312**

See Section 2 for more information.

**SARA 313**

| Chemical Name | CAS No | Weight % | SARA 313-Threshold Values % |
|---|---|---|---|
| Hydrogen peroxide | - | - | - |
| Sodium azide | 26628-22-8 | 0.5-1 | 1.0 |

**CERCLA Reportable Quantity**

| Chemical Name | Hazardous Substance RQs | CERCLA EHS RQs | SARA Reportable Quantity RQ |
|---|---|---|---|
| Hydrogen peroxide | - | - | - |
| Sodium azide | 1000 lb | 1000 lb | 1000 lb<br>454 kg |

**Clean Air Act**

This product does not contain any hazardous air pollutants, as defined by the US Clean Air Act.

**Clean Water Act**

This product does not contain any hazardous substances listed under the US Clean Water Act.

**US State Regulations**

| Chemical Name | Massachusetts-RTK | New Jersey-RTK | Pennsylvania-RTK | Illinois-RTK | Rhode Island-RTK |
|---|---|---|---|---|---|
| Hydrogen peroxide | - | - | Listed | - | Listed |
| Sodium azide | Listed | Listed | Listed | - | Listed |

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**International Regulations**
No data available.

**Substances listed under Annex I of Regulation (EC) No 689/2008**
None.

**Restricted substances under Annex V of Regulation (EC) No 689/2008**
None.

**Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC**
None.

**Other countries**

| Chemical Name | EINECS (European Union) | ELINCS (European List of Notified Chemical Substances) | ENCS (Japan) | PICCS (Philippines) |
|---|---|---|---|---|
| Hydrogen peroxide | Listed | - | Listed | Listed |
| Sodium azide | Listed | - | Listed | Listed |

| Chemical Name | AICS (Australia) | South Korea (KECL) | Canada (DSL) | NDSL |
|---|---|---|---|---|
| Hydrogen peroxide | Listed | Listed | Listed | - |
| Sodium azide | Listed | Listed | Listed | - |

**15.2 Chemical safety assessment**
No data available.

## SECTION 16. OTHER INFORMATION

**Disclaimer**
The above information is believed to be correct but shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Molecular Instruments, Inc. cannot control the actual methods, volumes, or conditions of use, Molecular Instruments, Inc. shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this safety data sheet (SDS) does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose. See www.hcrimaging.com/legal/terms for our terms of sale.