Printing date 01/03/2023

Reviewed on 01/03/2023

1 Identification

- · Product identifier
- · Trade name: IB-64 (QX-102 Imaging Buffer)
- · Article number: IB-64
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Electron Microscopy Sciences 1560 Industry Road USA-Hatfield, PA 19440 Tel: 215-412-8400 Fax: 215-412-8450 email: info@emsdiasum.com www.emsdiasum.com
- · Information department: Product safety department
- Emergency telephone number: ChemTrec 1-800-424-9300 Contract <u>CCN7661</u> 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

· Label elements

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



Signal word Warning
Hazard statements
Harmful if swallowed.
Precautionary statements
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
Store in a well-ventilated place. Keep cool.
Store in a closed container.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Classification system:
NFPA ratings (scale 0 - 4)



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· HMIS-ratings (scale 0 - 4)



• Other hazards

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description

Imaging Buffer Dry Powder (proprietary formulation)

4 First-aid measures

· Description of first aid measures

• General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: 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 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

• Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

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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.

· Protective Action Criteria for Chemicals

• PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

PAC-3:

Substance is not listed.

7 Handling and storage

· Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- Information about protection against explosions and fires: No special measures required.
- · 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: None.
- 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.

- 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.
- Wash hands before breaks and at the end of work.
- 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:

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 • *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.

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[·] Control parameters

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• **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:* Goggles recommended during refilling.

9 Physical and chemical properties

· Information on basic physical and	chemical properties	
· General Information		
· Appearance:		
Form:	Powder	
Color:	White	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	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 determined.	
· Density:	Not determined.	
Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wat	er): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.0 %	
• Other information	No further relevant information available.	
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10 Stability and reactivity

- · Reactivity No further relevant information available.
- · 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 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

· 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

- · 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 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

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[·] Toxicity

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13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · 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 · DOT, ADR, IMDG, IATA Void · UN proper shipping name · DOT, ADR, IMDG, IATA Void • Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class Void · Packing group · DOT, ADR, IMDG, IATA Void · Environmental hazards: Not applicable. · Special precautions for user Not applicable. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · UN "Model Regulation": Void

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· 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 not listed.

Hazardous Air Pollutants

Substance is not listed.

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

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• 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)

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*



· Signal word Warning

· Hazard statements

Harmful if swallowed.

Precautionary statements
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
Store in a well-ventilated place. Keep cool.
Store in a closed container.
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 is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Contact:

- · Date of preparation / last revision 01/03/2023 / -
- Dute of preparation / tast revision 01/05/2023 / Abbreviations and acronyms:

 ADR: Accord relatif au transport international 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 Transport association
 IATA: International Air Transport Association
 CAS: Chemical Abstracts Service (division of the American Chemical Society)

 NFPA: National Fire Protection Association (USA)

 HMIS: Hazardous Materials Identification System (USA)

 VOC: Volatile Organic Compounds (USA, EU)

 PBT: Persistent, Bioaccumulative and Toxic

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NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Toxicity - Oral 4: Acute toxicity – Category 4 (Contd. of page 7)

US