abcam SAFETY DATA SHEET

| Issuing Date 30-Apr-2021 | Revision date 16-Aug-2021 | Revision Number | 1.01 |
|--|---|-----------------|------|
| 1. Identification | | | |
| Product identifier | | | |
| Product Name | WST Reagent (lyophilized) | | |
| Other means of identification | | | |
| Product Code(s) | CP10036 | | |
| UN/ID no | UN1759 | | |
| Synonyms | None | | |
| Recommended use of the chemical | and restrictions on use | | |
| Recommended use | For research use only. Not for use in diagnostic procedures | | |
| Restrictions on use | No information available | | |
| Details of the supplier of the safety | data sheet | | |
| Manufacturer Address Abcam Inc 152 Grove St. Waltham, MA 02453 USA Tel: (617) 225-2272 or 888-77-ABCAM (22226) (US toll free) Fax: (866) 739-9884 or (866) 457-9616 (both US toll free) | | | |
| E-mail | us.technical@abcam.com, sds@abcam.com | | |
| Emergency telephone number | | | |
| Emergency Telephone | +1 866 928 0789 (Toll free) /+1 202 464 2554 | | |
| | | | |

2. Hazard(s) identification

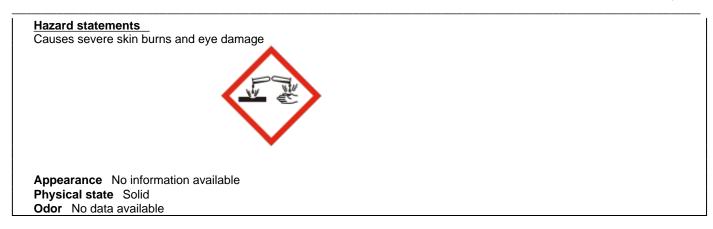
Classification

| Skin corrosion/irritation | Category 1 Sub-category B |
|-----------------------------------|---------------------------|
| Serious eye damage/eye irritation | Category 1 |

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Signal word Danger



Precautionary Statements - Prevention

Do not breathe dusts or mists Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor 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 or doctor IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTER or doctor IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal Dispose of contents/container to an approved waste disposal plant

Other information

No information available.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% | Trade secret |
|---------------|-------------|----------|--------------|
| WST-8 | 193149-74-5 | 100* | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General adviceImmediate medical attention is required. Show this safety data sheet to the doctor in
attendance.InhalationRemove to fresh air. If breathing has stopped, give artificial respiration. Get medical
attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the
substance; give artificial respiration with the aid of a pocket mask equipped with a one-way
valve or other proper respiratory medical device. If breathing is difficult, (trained personnel
should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

| | advice/attention. | |
|--|---|--|
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. | |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. | |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. | |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8). | |
| Most important symptoms and effects, both acute and delayed | | |
| Symptoms | See Section 2.2 for more information. Burning sensation. | |
| Indication of any immediate medical attention and special treatment needed | | |
| Note to physicians | Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. | |

5. Fire-fighting measures

| Suitable Extinguishing Media Large Fire | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient. | |
|--|---|--|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. | |
| Specific hazards arising from the chemical | The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. | |
| Explosion data Sensitivity to mechanical impact None. | | |
| Sensitivity to static discharge | None. | |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. | |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
|----------------------|---|
| Other information | Refer to protective measures listed in Sections 7 and 8. |

Methods and material for containment and cleaning up

| Methods for containment | Prevent further leakage or spillage if safe to do so. |
|-------------------------|---|

Methods for cleaning up Pick up and transfer to pro

Pick up and transfer to properly labeled containers.

7. Handling and storage

| Precautions for safe handling | |
|-------------------------------------|--|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. |
| Conditions for safe storage, includ | ing any incompatibilities |
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. |

8. Exposure controls/personal protection

Control parameters

| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational |
|-----------------|---|
| | exposure limits established by the region specific regulatory bodies. |

Appropriate engineering controls

| Engineering controls | Showers Eyewash stations Ventilation systems. |
|------------------------------------|---|
| Individual protection measures, su | ch as personal protective equipment |
| Eye/face protection | Tight sealing safety goggles. Face protection shield. |
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn. |
| General hygiene considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. |

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid Lyophilized

| Appearance | No information available | |
|---------------------------------|--------------------------|------------------|
| Color | colorless | |
| Odor | No data available | |
| Odor threshold | No information available | |
| Property_ | Values | Remarks • Method |
| pH | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive | No data available | |
| limits | | |
| Lower flammability or explosive | No data available | |
| limits | | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Relative density | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Other information | | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |
| Softening point | No information available | |
| Molecular weight | No information available | |
| VOC Content (%) | No information available | |
| Liquid Density | No information available | |
| Bulk density | No information available | |

10. Stability and reactivity

| Reactivity | No information available. |
|------------------------------------|---|
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Exposure to air or moisture over prolonged periods. |
| Incompatible materials | Acids. Bases. Oxidizing agent. |
| | |

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

| | Pulmonary edema can be fatal. | | | |
|--|--|--|--|--|
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes. | | | |
| Skin contact | Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. | | | |
| Ingestion | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around th mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. | | | |
| Symptoms related to the physical, chemical and toxicological characteristics | | | | |
| Symptoms | Redness. Burning. May cause blindness. Coughing and/ or wheezing. | | | |
| Acute toxicity | | | | |
| Numerical measures of toxicity | | | | |

No information available

| Delayed and immediate effects as v | vell as chronic effects from short and long-term exposure | | | |
|------------------------------------|--|--|--|--|
| Skin corrosion/irritation | Classification based on data available for ingredients. Causes burns. | | | |
| Product Information | | | | |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns. | | | |
| Product Information | | | | |
| Respiratory or skin sensitization | No information available. | | | |
| Product Information | | | | |
| Germ cell mutagenicity | No information available. | | | |
| Product Information | | | | |
| Carcinogenicity | No information available. | | | |
| Product Information | | | | |
| Reproductive toxicity | No information available. | | | |
| Product Information | | | | |
| STOT - single exposure | No information available. | | | |
| Product Information | | | | |
| STOT - repeated exposure | No information available. | | | |
| Product Information | | | | |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Aspiration hazard | No information available. | | |
|-----------------------|---------------------------|--|--|
| Other adverse effects | No information available. | | |
| Interactive effects | No information available. | | |

12. Ecological information

| Ecotoxicity | The environmental impact of this product has not been fully investigated. | | |
|-------------------------------|---|--|--|
| Product Information | | | |
| Persistence and degradability | No information available. | | |
| Bioaccumulation | There is no data for this product. | | |
| Other adverse effects | No information available. | | |

13. Disposal considerations

| Waste treatment methods | |
|--|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

14. Transport information

| DOT UN/ID no Proper shipping name Transport hazard class(es) Packing group Special Provisions DOT Marine Pollutant Description Emergency Response Guide Number | UN1759 CORROSIVE SOLIDS, N.O.S. 8 II 128, IB8, IP2, IP4, T3, TP33 Np UN1759, CORROSIVE SOLIDS, N.O.S. (WST-8), 8, II 154 |
|---|---|
| ICAO (air) UN/ID no Proper shipping name Transport hazard class(es) Packing group Description Special Provisions | UN1759 CORROSIVE SOLID, N.O.S. 8 II UN1759, CORROSIVE SOLID, N.O.S. (WST-8), 8, II A3 |
| IATA UN number or ID number UN proper shipping name Transport hazard class(es) Packing group IATA Technical Name | UN1759 CORROSIVE SOLID, N.O.S. 8 II WST-8 |

| Description | UN1759, CORROSIVE SOLID, N.O.S. (WST-8), 8, II | | |
|----------------------------|--|--|--|
| IMDG | | | |
| UN number or ID number | UN1759 | | |
| UN proper shipping name | CORROSIVE SOLID, N.O.S. | | |
| Transport hazard class(es) | 8 | | |
| Packing group | II | | |
| EmS-No | F-A, S-B | | |
| Special Provisions | 274 | | |
| Marine pollutant | NP | | |
| Description | UN1759, CORROSIVE SOLID, N.O.S. (WST-8), 8, II | | |

15. Regulatory information

TSCA

Contact supplier for inventory compliance status.

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

International Inventories

| TSCA | Does not comply |
|---------------|-----------------|
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |

| ENCS | Does not comply |
|-------|-----------------|
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AICS | Does not comply |

Legend: X - Listed

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

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

| 16. Other information | <u>on</u> | | | | |
|---|--|--|---|--|--|
| | ealth hazards 3 ealth hazards 3 | Flammability 0 Flammability 0 | Instabi Physic | ility 0 al hazards 0 | Special hazards - Personal protection X |
| | | RSONAL PROTECT | ION | STEL (Short Te Skin designatio | erm Exposure Limit) n |
| Key literature references a Agency for Toxic Substance U.S. Environmental Protecti European Food Safety Auth EPA (Environmental Protect Acute Exposure Guideline L U.S. Environmental Protecti U.S. Environmental Protecti Food Research Journal Hazardous Substance Datal International Uniform Chemi Japan GHS Classification Australia National Industrial NIOSH (National Industrial NIOSH (National Institute fo National Library of Medicine National Library of Medicine National Library of Medicine National Toxicology Program New Zealand's Chemical Cla Organization for Economic C Organization for Economic C World Health Organization | es and Disease Registr on Agency ChemView ority (EFSA) tion Agency) evel(s) (AEGL(s)) on Agency Federal Ins on Agency High Produ- base ical Information Database chemicals Notification r Occupational Safety 's ChemID Plus (NLM 's PubMed database (n (NTP) assification and Inform Co-operation and Deve Co-operation and Deve | ry (ATSDR) Database secticide, Fungicide, a action Volume Chemi- ase (IUCLID) and Assessment So and Health) CIP) NLM PUBMED) nation Database (CCI elopment Environmer elopment High Produ | and Rodenticid cals heme (NICNA b) t, Health, and ction Volume C | S) Safety Publicati hemicals Progr | |
| Issuing Date Revision date Revision Note <u>Disclaimer</u> The information provided in | | 21 ation available. | t of our knowle | dae, informatio | n and belief at the date of its |

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet