SAFETY DATA SHEET

In compliance with Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances, Directive 98/79/EC on In Vitro Diagnostic Medical Devices and mixtures, REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) 2021/979 amendment, and U.S. OSHA Hazard Communication 29CFR1910.1200

Section 1: Product Identification

Product Name: SICKLEDEX® Buffer Reagent
Synonyms: Qualitative solubility test kit for detection of sickling hemoglobins
CAS Number: Mixture, N/A
Product Use: Testing for the presence of sickling hemoglobins in human blood or sickle cell control material.

Manufacturer: Streck
Address: 7002 S. 109 St,
La Vista, NE, 68128

Emergency: Business hours: 1-402-333-1982
24hr (Chem.-Tel): 1-800-255-3924

Section 2: Hazards Identification

Classification: Skin Sensitization, (Category 1), H317
Reproductive Toxicity, (Category 2), H361

Label Elements: Container labeling is not required on medical devices per 29CFR1910.1200(b)(5).
Symbol: Skull and Crossbones, Health hazard
Signal Word: Danger

Hazard Statements:
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child

Precautionary Statements:
*Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202).
Avoid breathing dust/fume/gas/mist/vapors/spray(P261). Wear protective gloves/ protective clothing/ eye protection/ face protection (P280). Wash skin thoroughly after handling (P264). Do not eat, drink or smoke when using this product (P270).
Contaminated work clothing should not be allowed out of the workplace (P272). Wash contaminated clothing before reuse (P363).
Specific treatment: **IF SWALLOWED**: Rinse mouth. Immediately call a POISON CENTER or doctor/physician (P301+P310+P330). **IF ON SKIN:** Wash with plenty of soap and water (P302+P352). If skin irritation or rash occurs: Get medical advice/ attention (P333+P313). IF exposed or concerned: Get medical attention (P308+P313).
Store locked up (P405). Avoid release to the environment (P273). Dispose of contents/ container to an approved waste disposal plant (P501).

*Special instructions refer to Instructions for Use (IFU) and labeling.

Other hazards: No data available.

Section 3: Composition

CAS #	Hazardous Component	Synonyms	% by weight
79-07-2	2-Chloracetamide	N/A	0.1

Section 4: First Aid Measures

List specific first aid measures for:

1. **Skin Contact** – Wash off with soap and plenty of water. Take victim to hospital and consult a physician.
2. **Eye contact –** Flush eyes with water.
3. **Ingestion –** Rinse mouth with plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
4. **Inhalation -** Move to fresh air. Call a physician or poison control center immediately. If breathing stops provide artificial respiration.

Most important symptoms and effects, both acute and delayed:
Allergic skin reaction

Indication of immediate medical attention and special treatment needed:
No data available

Section 5: Fire Fighting Measures

Suitable Extinguishing media	Alcohol resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the chemical	Carbon Dioxides, Nitrogen oxides (NOx), Hydrogen Chloride gas
Special protective equipment and precautions for fire-fighters.	Self-contained respiratory device as needed.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

PPE needed for clean up: Respiratory protection and PPE as detailed in section 8.
Evacuate personnel to safe areas.
Avoid dust formation and breathing dust, vapors, mist or gas.
Ensure adequate ventilation.

Methods and materials for containment and cleaning up

Spill clean-up procedure: Sweep up and shovel taking care not to create dust. Keep in suitable, closed containers for disposal.
Follow-up guidelines: Prevent further leakage or spillage. Do not let product enter drains and avoid discharge into the environment.

Section 7: Handling and Storage

Refer to Instructions for Use (IFU) and labeling for handling and storage.

Handling	Wear appropriate PPE and use in a well-ventilated area.		
Storage	Store tightly capped in a well-ventilated place.		
Temp	2 – 30°C	**Warnings**	Do not freeze.
Avoid	Contact with skin and eyes and formation of dust and aerosols. Strong oxidizing agents, strong acids, strong bases, and strong reducing agents.		

Section 8: Exposure Control and Personal Protection

Control parameters: Occupational exposure limit values, i.e. PEL, STEL and TLV, have not been assigned for this mixture by OSHA or the American Conference of Governmental Industrial Hygienists (ACGIH).

Engineering control recommendations:
As supplied, use general room ventilation. Avoid contact with skin, eyes and clothes. Wash hands after handling the product.

Individual protection measures:

PPE: Standard Laboratory:

Eye/ Face: NIOSH (US) or EN 166 (EU) approved face shield and safety glasses.

Skin: Handle with gloves and utilize proper glove removal technique to avoid skin contact. Wash and dry hands.

Body: Lab coat or chemical suit.

Additional suggestions: Where room ventilation is not sufficient utilize a NIOSH (US) or EN 166 (EU) approved air-purifying respirator.

Section 9: Physical and Chemical Properties

Physical State	Liquid	**Color**	White
Odor	No data available	**Odor Threshold**	No data available
pH	7.0 ± 0.5	**Melting/ Freezing point**	116-118°C (241-244°F)
Boiling point	No data available	**Boiling range**	No data available
Flash Point	No data available	**Evaporation rate**	No data available
Flammability	No data available	**Upper/lower flammability**	No data available
Explosive limits	No data available	**Vapor pressure**	0.07 hPa (0.05mmHG at 20°C (68°F)
Vapor density	No data available	**Relative density**	No data available
Solubility(ies)	No data available	**Partition coefficient: n-octanol water**	No data available
Auto-ignition temperature	No data available	**Decomposition Temperature**	No data available
Viscosity	No data available		

Section 10: Stability and Reactivity

1. **Reactivity:** No data available.
2. **Chemical Stability:** Stable under recommended storage conditions.
3. **Possibility of hazardous reactions:** No data available.
4. **Conditions to avoid:** No data available.
5. **Incompatible materials:** Strong oxidizing agents, strong acids, strong bases, and strong reducing agents.
6. **Hazardous decomposition products:** No data available. In the event of fire see section 5.

Section 11: Toxicological Properties

Toxicological effects:	No data available
Route(s) of exposure:	No data available
Symptoms:	No data available
Delayed effects:	No data available
Immediate effects:	No data available
Chronic effects:	Short exposure: No data available
	Long exposure: No data available
Exposure limits	No data available
Carcinogenicity	Not listed as carcinogens or suspect carcinogens
Measures of Toxicity	Acute Toxicity: LD50 Oral- Rat – 138 mg/kg, Behavioral: Ataxia. Lungs, Thorax or Respiration: Dyspnea.

Section 12: Ecological Information

Ecotoxicity:	Acute aquatic effects: LC50- *Carassius auratus* (goldfish) – 19.8 mg/L – 96 h, EC50- *Daphnia magna* (Water flea) – 14 mg/l – 48 h

Section 13: Disposal Considerations

To the best of our knowledge, this material does not require special disposal considerations. Adhere to local, state and federal regulations with regard to disposal of this product.

Section 14: Transport Information

DOT:

Proper Shipping Name: Toxic Liquids, organic, n.o.s. (2-Chloracetamide)
Hazard Class: 6.1
UN: UN2810
Packing Group: III

IATA:

Proper Shipping Name: Toxic Liquids, organic, n.o.s. (2-Chloracetamide)
Hazard Class: 6.1
IATA UN: UN2810
Packing Group: III

Section 15: Regulatory Information

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

U.S. Federal Regulations	
OSHA Hazards	Irritant
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard
Toxic Substances Control Act (TSCA)	
U.S. State Regulations	
California Proposition 65	Reproductive Toxicity to both males and females
International Regulations	
DSL Status	Some components of this product are on the Canadian DSL or NDSL lists.
European Union (EU)	
Regulation (EC) No 1272/2008	Classification, labelling and packaging of substances
Directive 98/79/EC	In Vitro Diagnostic Medical Devices and mixtures

15.2 Chemical safety assessment: For this mixture, a chemical safety assessment has not been carried out.

Section 16: Other

This product is intended for use as supplied.

To the best of our knowledge, the information contained herein is accurate. However, Streck assumes no liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of preparation/ last revision: June 25, 2024

SAFETY DATA SHEET

In compliance with Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances, Directive 98/79/EC on In Vitro Diagnostic Medical Devices and mixtures, REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) 2021/979 amendment, and U.S. OSHA Hazard Communication 29CFR1910.1200

Section 1: Product Identification

Product name: *SICKLEDEX*® Solubility Powder
Synonyms: N/A
CAS Number: Mixture, N/A
Product Use: Qualitative solubility test kit used to detect the presence of sickling hemoglobins in human blood or sickle cell control material.
Restrictions: Refer to Instructions for Use (IFU) for additional precautions and limitations.

Manufacturer: Streck
Address: 7002 S. 109 St,
La Vista, NE, 68128

Emergency: Business hours: 1-402-333-1982
24hr (Chem.-Tel): 1-800-255-3924

Section 2: Hazards Identification

Classification: Physical Hazards:
Self-heating substances and mixtures, category 1
Health Hazards:
Acute toxicity:
Oral, category 4
Serious eye damage/ irritation, category 2A
Specific target organ toxicity – single exposure, category 3, respiratory system
Acute aquatic toxicity, category 2
Chronic aquatic toxicity, category 2

Label Elements: Container labeling is not required on medical devices per 29CFR1910.1200(b)(5).
Symbol: Flame, exclamation point, dangerous for the environment
Signal Word: Danger

Hazard Statements:
Self-heating: may catch fire, H251
Harmful if swallowed, H302
Causes serious eye irritation, H319
May cause respiratory irritation, H335
Toxic to aquatic life with long lasting effects, H411

Precautionary Statements:
Keep cool and protect from sunlight, (P235+410). Store in a well-ventilated place away from other materials and keep container tightly closed (P233). Keep away from heat, hot surface, sparks, open flames, and other ignition sources. No smoking (P210). Maintain air gap between stacks/ pallets (P407). Refer to sections 5 and 7 for additional information.

Do not eat, drink or smoke when using the product (P270). Wear protective gloves/ protective clothing/ eye protection/ face protection (P280). Avoid breathing dust/ fume/ gas/ vapors/ spray (P261).

Use only in a well-ventilated area (P271). Wash skin thoroughly after handling (P264).

IF SWALLOWED: Rinse mouth and call a POISON CENTER or doctor/ physician if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

IF INHALED: Remove victim to fresh air and keep at a rest in a position comfortable for breathing.

Avoid release into the environment, collect spillage, and dispose of contents/ container to an approved waste disposal plant.

Other hazards:

Contact with water or acid liberates toxic gas.
Contact with water creates exothermic reaction.

Section 3: Composition

CAS #	Hazardous Component	Synonyms	% by weight
7775-14-6	Sodium Hydrosulfite	Sodium dithionite	84
8047-15-2	Saponin	N/A	< 2

Section 4: First Aid Measures

List specific first aid measures for:

1. **Skin Contact** – In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.
2. **Eye contact** – In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
3. **Ingestion** – If swallowed, wash out mouth with water; provided person is conscious. Never give anything by mouth to an unconscious person. Call a physician.
4. **Inhalation** - If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

Most important symptoms and effects, both acute and delayed: No data available
In case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible).

Indication of immediate medical attention and special treatment needed: No data available

Section 5: Fire Fighting Measures

Suitable Extinguishing media	Dry chemical powder.
Special hazards arising from the chemical	Addition of small amounts of water or temperatures above 100°C may cause self-ignition. May decompose on exposure to air and moisture. Dust potential: this material, like most materials in powder form, is capable of creating a dust explosion.
Special protective equipment and precautions for fire-fighters.	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Flammable solid. Emits toxic fumes under fire conditions.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Avoid dust formation. Avoid breathing dust, vapors, mist or gas.

PPE needed for clean up: Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. See section 8 for additional information.

Methods and materials for containment and cleaning up

Spill clean-up procedure: Evacuate area. Shut off all sources of ignition. Cover with dry-lime, sand, or soda ash. Place in suitable, covered containers using non-sparking tools and transport outdoors. Dispose of according to local regulations. Do not flush with water.

Follow-up guidelines: Ventilate area and wash spill site after material pickup is complete.

Section 7: Handling and Storage

Handling	User exposure: Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid prolonged or repeated exposure. Handle under nitrogen. Avoid formation of dust and aerosols.		
Storage	Keep container closed. Keep away from heat, sparks, and open flame. Store in a cool dry place. Handle and store under nitrogen.		
Temp	As indicated on packaging	**Avoid**	Do not allow contact with water. Avoid contact with acid.
Warnings	Air sensitive. Heat and moisture sensitive.		

Section 8: Exposure Control and Personal Protection

Control parameters: Does not contain substances with occupational exposure limit values.

Engineering control recommendations: Handle in accordance with good industrial hygiene and safety practices. Limit or avoid generation of dust while transferring contents from vial. Wash hands thoroughly after handling.

Individual protection measures:

PPE:

Respiratory: Respiratory protection is not required.

Skin: Nitrile rubber gloves.

Eye/ face: Face shield and/or safety goggles.

Additional suggestions: Wash thoroughly after handling.

Section 9: Physical and Chemical Properties

Physical State	Solid, powder	**Color**	White
Odor	No data available	**Odor Threshold**	No data available
pH	No data available	**Melting/ Freezing point**	No data available
Boiling point	No data available	**Boiling range**	No data available
Flash Point	No data available	**Evaporation rate**	No data available
Flammability	No data available	**Upper/lower flammability**	No data available
Explosive limits	No data available	**Vapor pressure**	No data available
Vapor density	No data available	**Relative density**	No data available
Solubility(ies)	No data available	**Partition coefficient: n-octano/ water**	No data available
Auto-ignition temperature	Self-heating, category 1	**Decomposition Temperature**	No data available
Viscosity	No data available		

Section 10: Stability and Reactivity

1. **Reactivity:** No data available.
2. **Chemical Stability:** Stable under recommended storage conditions.
3. **Possibility of hazardous reactions:** No data available.
4. **Conditions to avoid:** May decompose on exposure to air and moisture (moisture sensitive). Do not allow water to enter container because of violent reaction. Avoid contact with air, moisture, and heat.
5. **Incompatible materials:** Strong oxidizing agents and acids.
6. **Hazardous decomposition products**: Sulfur oxides, Sodium/sodium oxides.

Section 11: Toxicological Properties

Toxicological effects:	Acute Toxicity, Eye irritation, Specific target organ toxicity-respiratory system
Route(s) of exposure:	Skin, eye, respiratory, digestive
Symptoms:	Irritation at site of exposure (eye, respiratory.)
Delayed effects:	No data available
Immediate effects:	No data available
Chronic effects:	Short exposure: No data available
	Long exposure: No data available
Exposure limits	No data available
Carcinogenicity	Not listed as carcinogens or suspect carcinogens
Measures of Toxicity	No data available

Section 12: Ecological Information

Ecotoxicity:	Acute aquatic effects: LC50 Fish: *Leuciscus idus*: LC_{50}=10.0-100.0 mg/L/96 Hr., EC50 Daphnia: *Daphnia magna*: LC_{50}=10.0-100.0 mg/L/48 HR., IC50 Algae: LC_{50} = >100 mg/L/72 Hr.

Section 13: Disposal Considerations

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an after burner and scrubber, but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Section 14: Transport Information

DOT:

Proper Shipping Name: Sodium dithionite (or) Sodium hydrosulfite
Hazard Class: 4.2
Identification Number: UN1384
Packing Group II
Hazard Label: Spontaneously combustible

IATA:

Proper Shipping Name: Sodium dithionite (or) Sodium hydrosulfite
Hazard Class: 4.2
IATA UN Number: UN1384
Packing Group: II
Hazard Label: Spontaneously combustible

Section 15: Regulatory Information

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

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OSHA Hazards	Irritant
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard
Toxic Substances Control Act (TSCA)	
U.S. State Regulations	
California Proposition 65	Reproductive Toxicity to both males and females
International Regulations	
DSL Status	Some components of this product are on the Canadian DSL or NDSL lists.
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15.2 Chemical safety assessment: For this mixture, a chemical safety assessment has not been carried out.

Section 16: Other

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Date of preparation/ last revision: June 27, 2024