1. IDENTIFICATION

1.1 Product identification

- **Product Name***:* Pyranine
- **CAS Number:** 6358-69-6
- **EC Number:** 228-783-6
- **Product Code:** NOR-6358696
- **Synonyms:** Trisodium 8-hydroxypyrene-1,3,6-trisulfonate, Solvent Green 7, HPTS

1.2 Recommended use of the chemical and restrictions on use

- **Identified uses:** Laboratory chemical reagent for Research & Development (R&D) purposes. Fluorescent dye, pH indicator, biological stain. Not for food, drug, household, cosmetic, or medical use unless authorized for such use by a pertinent qualified regulatory body.

1.3 Details of the supplier of the safety data sheet

NorrChemica™ ,
Saniaistie 26B7, 00730 Helsinki, Finland
Website: www.norrchemica.com, email: contact@norrchemica.com
Emergency phone (business hours): +358 405759523
Responsible for SDS: Regulatory Affairs Department

1.4 Emergency telephone number

- **CHEMTREC (24/7)**: +44 20 7771 5310 (International Chemical Emergency Support) - This number provides general advice for chemical incidents.
- **For local emergency services**, contact your regional health and safety authority.
- **For non-emergency inquiries during business hours (09:00-17:00 EET):** +358 405759523

2. HAZARDS IDENTIFICATION

Classification according to CLP Regulation (EC) No 1272/2008: This substance is not classified as hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.1. ***GHS pictogram*** – None required

2.2. ***GHS signal word*** – None required

2.3. ***GHS hazard statement(s)*** – None required

2.4. ***GHS precautionary statement(s)*** – None

2.5. Results of PBT and vPvB assessment – This substance does not meet the criteria for classification as PBT (Persistent, Bioaccumulative, and Toxic) or vPvB (very Persistent and very Bioaccumulative) in accordance with Annex XIII of Regulation (EC) No 1907/2006 (REACH).

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

- **Components:** Pyranine
- **Percentage (purity%):** >85.0% (Dye content)
- **CAS RN:** 6358-69-6
- **EC Number:** 228-783-6
- **Chemical Formula:** $C_{16}H_7Na_3O_{10}S_3$

4. FIRST AID MEASURES

- **General advice** - No special measures required. Consult a physician if symptoms persist. Show this safety data sheet to the doctor in attendance.
- **Eye Contact** - Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops or persists.
- **Skin Contact** - Wash off with soap and plenty of water. Get medical attention if irritation develops or persists.
- **Inhalation** - Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.
- **Ingestion** - Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if symptoms occur.
- **Most important symptoms and effects** - To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. May cause mild irritation if inhaled as dust or upon skin/eye contact.
- **Notes to Physician** - Treat symptomatically

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

- **Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Adapt extinguishing measures to the surrounding area.
- **Unsuitable extinguishing media:** No data available / None known.

5.2. Special hazards arising from the substance or mixture

- **Hazardous decomposition products formed under fire conditions:** Carbon oxides (CO, CO_2), Sulphur oxides (SOx), Sodium oxides.

5.3. Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective clothing for firefighting if necessary.
- Approach fire from upwind to avoid hazardous vapours and decomposition products.
- Prevent fire extinguishing water from contaminating surface water or groundwater.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

- Wear personal protective equipment (refer to Section 8). Keep unnecessary personnel away.
- Avoid dust formation. Ensure adequate ventilation.
- Avoid breathing dust, vapours, mist, or gas.

6.2. Environmental precautions

- Prevent further leakage or spillage if safe to do so.
- Do not let product enter drains, surface water, soil or subsoil.

6.3. Methods and materials for containment and cleaning up

- Pick up and arrange disposal without creating dust. Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Keep in suitable, closed containers for disposal (refer to Section 13). Clean contaminated surface.

7. HANDLING AND STORAGE

7.1. Handling advice

Avoid contact with skin, eyes, and clothing. Avoid ingestion and inhalation. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling.

7.2. Storage conditions

Keep container tightly closed. Store in a cool, dry, and well-ventilated place. Store at room temperature. Protect from direct light/sunlight. Store away from incompatible materials such as strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

- Contains no substances with occupational exposure limit values established by the European Union or national authorities.

8.2. Exposure controls

- **Appropriate engineering controls:**
  - Ensure adequate ventilation, especially in confined areas.
  - Use local exhaust ventilation if dust generation is likely.
  - Ensure that eyewash stations and safety showers are close to the workstation location.
- **Personal protective equipment (PPE):**
  - **Eye/face protection:** Wear safety glasses with side-shields conforming to EN166 (EU). Use chemical safety goggles if significant dust generation is likely or for splash protection.
  - **Hand protection:** Wear compatible chemical-resistant gloves (e.g., Nitrile rubber, minimum layer thickness 0.11 mm) conforming to EN374 (EU). Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
  - **Skin and body protection:** Wear suitable protective clothing, such as a laboratory coat. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
  - **Respiratory protection:** Respiratory protection is not normally required if engineering controls are adequate. If dusts are generated above nuisance levels and engineering controls are insufficient, use type P1 (EN 143) dust masks or equivalent respirators approved under appropriate government standards.
- **Environmental exposure controls:**
  - Prevent product from entering drains. Refer to Section 6.2.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Colour:** Yellow to greenish-yellow
- **Form:** Solid powder
- **Molar Mass:** 524.39 g/mol
- **Solubility:** Soluble in water (ca. 156 g/L at 20 °C).
- **Melting point:** >250 °C (dec)
- **Molecular Formula:** $C_{16}H_7Na_3O_{10}S_3$
- **Odour:** Characteristic.
- **pH:** No data available
- **Boiling point range:** >300 °C (at 1013 hPa)

- **Flash point:** 250 °C .
- **Flammability (solid, gas):** Combustible but will not ignite readily.
- **Flammability or explosive limits: Lower:** No data available || **Upper:** No data available
- **Vapour pressure:** 0 Pa (at 25 °C).
- **Vapour density:** No information available.
- **Relative density:** 0.572 g/cm^3 (at 32 °C).
- **Partition coefficient (n-octanol/water):** log Pow -3.97 (ECHA).
- **Autoignition temperature:** 360 °C.
- **Decomposition temperature:** >252 °C.
- **Dynamic Viscosity:** No data available.
- **Kinematic Viscosity:** No information available.

10. STABILITY AND REACTIVITY

10.1. Reactivity: No specific reactivity hazards known under normal conditions of use.

10.2. Chemical stability: Stable under recommended storage conditions (refer to Section 7.2).

10.3. Possibility of hazardous reactions: Violent reaction with strong oxidizing agents.

10.4. Conditions to avoid: Dust generation, excess heat, direct sunlight/UV radiation.

10.5. Incompatible materials: Strong oxidizing agents.

10.6. Hazardous decomposition products: Under fire conditions: Carbon oxides (CO, CO_2), Sulphur oxides (SOx), Sodium oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- **Acute Toxicity:** LD50 Oral - Rat - > 2,000 mg/kg. LD50 Intravenous - Mouse - 1,050 mg/kg.
- **Skin corrosion/irritation:** Not classified. (Based on available data, the classification criteria are not met).
- **Serious eye damage/irritation:** Not classified. (Based on available data, the classification criteria are not met). May cause mild, transient irritation.
- **Respiratory or skin sensitization:** Not classified. (Based on available data, the classification criteria are not met).
- **Germ cell mutagenicity:** Not classified. (Based on available data, the classification criteria are not met).
- **Carcinogenicity:** IARC = No data available, NTP = No data available
- **Reproductive toxicity:** Not classified. (Based on available data, the classification criteria are not met).
- **STOT-single exposure:** Not classified.
- **STOT-repeated exposure:** Not classified.
- **Aspiration hazard:** Not classified.
- **RTECS Number:** UR2700000.

11.2 Carcinogenic categories

The substance is not listed in:

- IARC (International Agency for Research on Cancer)
- NTP (National Toxicology Program)
- OSHA-Ca (Occupational Safety & Health Administration)

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity: Not classified as hazardous to the aquatic environment.

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative potential: No indication of bioaccumulation (log Pow: -3.97).

12.4 Mobility in soil: Expected to be highly mobile on soil.

12.5 Results of PBT and vPvB assessment: This substance does not meet the criteria for classification as PBT or vPvB under Annex XIII of Regulation (EC) No 1907/2006 (REACH).

12.6. Endocrine disrupting properties: This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- **Product:**
  - Dispose of contents/container in accordance with local/regional/national/international regulations.
  - Offer surplus and non-recyclable solutions to a licensed disposal company.
  - Do not dispose of waste into sewer.
- **Contaminated packaging:**
  - Dispose of as unused product.
  - Empty containers should be taken to an approved waste handling site for recycling or disposal.
  - Handle uncleaned containers like the product itself.

14. TRANSPORT INFORMATION

14.1. UN number Not listed

14.2 UN proper shipping name

ADR/RID	Not listed
IMDG/IMO	Not listed
ICAO/IATA	Not listed

14.3 Transport hazard class(es)

ADR/RID	Does not correspond to the classification standard of the United Nations
IMDG/IMO	Does not correspond to the classification standard of the United Nations
ICAO/IATA	Does not correspond to the classification standard of the United Nations

14.4 Packaging group

ADR/RID	–
IMDG/IMO	–
ICAO/IATA	–

14.5 Environmental hazards IMDG/IMO Marine pollutant: No

14.6 Special precautions for user - No special precautions required

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code - Not applicable

15. REGULATORY INFORMATION

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

- **EU Regulations:**
  - This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP).
  - Substance is not listed on the REACH Candidate List of Substances of Very High Concern (SVHC).
  - Substance is not listed in REACH Annex XIV (Authorisation List).
  - Substance is not subject to restrictions under REACH Annex XVII.
- **No other specific national or regional regulatory provisions are known to apply to this substance.**

15.2. Chemical safety assessment

- A Chemical Safety Assessment (CSA) has not been carried out for this substance.

16. OTHER INFORMATION

Revision information: This Safety Data Sheet has been revised to comply with Regulation (EU) 2020/878.
Latest revision: v2.0 (EU-ENG) – 7th November 2025. Supersedes all previous editions.

Key literature and data sources:
ECHA Classification & Labelling (C & L) Inventory; REACH dossier summaries; OECD SIDS data; supplier SDS (Merck, TCI Europe, Thermo Fisher).

Disclaimer:
The information provided in this Safety Data Sheet is believed to be accurate and reliable at the date of issue. It is intended solely as guidance for safe handling, use, processing, storage, transport, disposal, and release of the substance. No warranty or guarantee of product properties is implied. This information relates only to the material specified and may not be valid if the material is used in combination with other substances or in any process not described herein. The user is responsible for determining the suitability of this information for their particular purposes and for ensuring compliance with all applicable legislation. Ensure that all personnel handling this material are familiar with the contents of this Safety Data Sheet and follow standard laboratory safety procedures.

End of Safety Data Sheet