according to Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2020/878

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier: High Intensity HRP Chemiluminescence ELISA Substrate

Product number: R001 (kit; components listed in Section 3)

1.2 Relevant identified uses: Laboratory reagent kit for research use only: detection of horseradish peroxidase (HRP) activity in chemiluminescence ELISA.

Uses advised against: Not for use in diagnostic or therapeutic procedures. Not for human or veterinary use.

1.3 Details of the supplier of the safety data sheet: HaemoScan BV, Stavangerweg 23-23, 9723 JC Groningen, The Netherlands. Tel. +31 (0)50 737 0187; e-mail mail@haemoscan.com; www.haemoscan.com

1.4 Emergency telephone number: +31 (0)50 737 0187 (HaemoScan; office hours only). National Poisons Information Centre (NVIC), the Netherlands: +31 (0)88 755 8000 (for medical professionals only).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product and its components are not classified as hazardous according to Regulation (EC) No 1272/2008 (CLP). The sodium perborate content is below the concentration limit (0.3%) for reproductive toxicity (Repr. 1B).

2.2 Label elements

Not applicable. The product does not require hazard labelling under Regulation (EC) No 1272/2008.

2.3 Other hazards: The product contains no material of biological origin. No component meets the PBT/vPvB criteria or has endocrine-disrupting properties at 0.1% or more.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Code	Component	Hazardous ingredients	Classification (CLP)
R001-1	Perborate solution (buffered aqueous solution, pH 5), 50, 125 or 250 mL	None	Not classified
R001-2	Luminol solution (luminol and enhancers in buffered aqueous solution, pH 9.5), 50, 125 or 250 mL	None	Not classified

Only ingredients that must be declared under REACH Annex II, Section 3.2, are listed; concentrations are given as ranges. Sodium perborate (Repr. 1B, H360Df) is present below the limit for declaration (0.1%).

For the full text of the hazard statements, see Section 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General: Move the person away from the source of exposure. If medical advice is needed, show this Safety Data Sheet to the doctor in attendance.

Eye contact: Rinse cautiously with plenty of water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Seek medical advice if irritation persists.

Skin contact: Wash with soap and plenty of water.

Ingestion: Rinse mouth with water. Do not induce vomiting. Seek medical advice if you feel unwell.

Inhalation: Move to fresh air. Inhalation is not an expected route of exposure under normal conditions of use.

4.2 Most important symptoms and effects, both acute and delayed: No specific symptoms known.

4.3 Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media: Use extinguishing media appropriate to the surrounding fire (water spray, foam, dry chemical or carbon dioxide). No unsuitable extinguishing media are known.

5.2 Special hazards arising from the substance or mixture: The product is not flammable. Combustion may produce oxides of carbon and nitrogen.

5.3 Advice for firefighters: Wear self-contained breathing apparatus and protective clothing if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective gloves, a laboratory coat and eye protection (see Section 8). Avoid contact with skin and eyes and avoid the formation of aerosols.

6.2 Environmental precautions: Do not allow undiluted product to enter drains or surface water.

6.3 Methods and material for containment and cleaning up: Absorb spilled liquid with inert absorbent material, rinse the area with water and dispose of the absorbent as chemical waste (see Section 13).

6.4 Reference to other sections: For personal protection see Section 8; for disposal see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Handle in accordance with good laboratory practice. Do not pipette by mouth. Avoid contact with skin and eyes. Do not eat, drink or smoke in the laboratory. Wash hands after handling.

7.2 Conditions for safe storage, including any incompatibilities: Store at room temperature, protected from direct sunlight and extreme temperatures; the Luminol solution is supplied in an amber bottle. Keep containers tightly closed. Never pipette directly from the bottle; pour the required amount into a plastic reservoir and do not return excess solution. Do not use after the expiry date.

7.3 Specific end use(s): Laboratory research use as described in the kit manual.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters: No occupational exposure limits have been established for the components of this product.

8.2 Exposure controls

Engineering controls: General laboratory ventilation is sufficient.

Eye/face protection: Safety glasses with side shields (EN 166).

Hand protection: Disposable nitrile gloves (EN ISO 374-1). Replace gloves immediately if contaminated or damaged.

Body protection: Laboratory coat.

Respiratory protection: Not required under normal conditions of use.

Environmental exposure controls: Do not allow undiluted product to enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Value
Physical state	Liquids
Colour	Perborate solution: colourless; Luminol solution: colourless to light purple/brown
Odour	Odourless
Melting point/freezing point	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not flammable
Lower and upper explosion limit	Not applicable
Flash point	Not applicable (aqueous solutions)
Auto-ignition temperature	Not applicable
Decomposition temperature	Not determined
pH	Perborate solution approx. 5; Luminol solution approx. 9.5
Kinematic viscosity	Not determined
Solubility	Miscible with water
Partition coefficient n-octanol/water (log value)	Not applicable (mixture)
Vapour pressure	Not determined
Density and/or relative density	Not determined (aqueous solutions approx. 1.0 g/cm³)
Relative vapour density	Not applicable
Particle characteristics	Not applicable (liquids)

9.2 Other information: The Luminol solution is light-sensitive.

SECTION 10: Stability and reactivity

10.1 Reactivity: No hazardous reactions are known under normal conditions of use.

10.2 Chemical stability: Stable under the recommended storage conditions.

10.3 Possibility of hazardous reactions: None known.

10.4 Conditions to avoid: Direct sunlight, heat and extreme temperatures.

10.5 Incompatible materials: Strong reducing agents; heavy-metal ions (decomposition of perborate).

10.6 Hazardous decomposition products: Perborate solution: oxygen on decomposition. None known under normal conditions of use.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008: No toxicological studies have been performed on the product. Based on the available data, the classification criteria are not met for any hazard class. Reproductive toxicity: the Perborate solution contains sodium perborate (Repr. 1B substance) below the concentration limit for classification.

11.2 Information on other hazards

Endocrine-disrupting properties: No component is known to have endocrine-disrupting properties at a concentration of 0.1% or more.

SECTION 12: Ecological information

12.1 Toxicity: No ecotoxicological data are available for the product. The components are not classified as hazardous to the aquatic environment.

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative potential: No potential for bioaccumulation is expected.

12.4 Mobility in soil: The components are miscible with water.

12.5 Results of PBT and vPvB assessment: No component meets the PBT or vPvB criteria of REACH Annex XIII at a concentration of 0.1% or more.

12.6 Endocrine-disrupting properties: No component is known to have endocrine-disrupting properties at a concentration of 0.1% or more.

12.7 Other adverse effects: None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods: Dispose of the product and its containers as chemical laboratory waste through a licensed waste disposal company, in accordance with local and national regulations. Do not discharge undiluted product into drains.

SECTION 14: Transport information

The product is not classified as dangerous goods under ADR/RID, IMDG or IATA.

14.1 UN number or ID number: Not applicable

14.2 UN proper shipping name: Not applicable

14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: None

14.6 Special precautions for user: Ship and store at room temperature. Protect from direct sunlight and freezing. Fragile containers; handle with care.

14.7 Maritime transport in bulk according to IMO instruments: Not applicable.

SECTION 15: Regulatory information

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

- Regulation (EC) No 1907/2006 (REACH).
- Regulation (EC) No 1272/2008 (CLP).
- Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2 Chemical safety assessment: A chemical safety assessment has not been carried out for this product.

SECTION 16: Other information

Full text of hazard statements: Not applicable (no hazard statements used).

Abbreviations: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; CAS: Chemical Abstracts Service; CLP: Regulation (EC) No 1272/2008; IATA: International Air Transport Association; IMDG: International Maritime Dangerous Goods Code; PBT: persistent, bioaccumulative and toxic; REACH: Regulation (EC) No 1907/2006; RID: Regulations concerning the International Carriage of Dangerous Goods by Rail; SVHC: substance of very high concern; vPvB: very persistent and very bioaccumulative.

Further information: This Safety Data Sheet has been prepared in accordance with Annex II of Regulation (EC) No 1907/2006, as amended by Regulation (EU) 2020/878. The information provided is

based on the present state of our knowledge and is intended to describe the product with regard to safety requirements. It does not constitute a guarantee of specific product properties.