

Safety Data Sheet

according to Regulation (EC) No 1907/2006

26036-49 Porphyrin 2 Reagent

Print date: 20.07.2015

Product code: 2603649

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

1.1. Product identifier

26036-49 Porphyrin 2 Reagent

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

HACH LANGE Ltd.
Unit 1, Chestnut Road Western Industrial Estate
IRL-Dublin 12
Tel. +353 (0)1 4602522
e-Mail: info@hach-lange.ie

1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Hazard categories:
Self-heating substance or mixture: Self-heat. 1
Acute toxicity: Acute Tox. 4
Hazard Statements:
Self-heating: may catch fire.
Harmful if swallowed.

2.2. Label elements

Hazardous components which must be listed on the label

sodium dithionite, sodium hydrosulphite

Signal word: Danger

Pictograms:



Hazard statements

H251 Self-heating: may catch fire.
H302 Harmful if swallowed.

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Precautionary statements

P235+P410 Keep cool. Protect from sunlight.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Special labelling of certain mixtures

EUH031 Contact with acids liberates toxic gas.

Additional advice on labelling

Classification according to EU Directives 67/548/EEC or 1999/45/EC
 The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients
3.1. Substances
Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7775-14-6	sodium dithionite, sodium hydrosulphite			100 %
	231-890-0	016-028-00-1		
	Self-heat. 1, Acute Tox. 4; H251 H302 EUH031			

Full text of H and EUH phrases: see section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.
 Call a physician immediately. Show this safety data sheet to the doctor in attendance.

4.2. Most important symptoms and effects, both acute and delayed

irritant effects, Cough, Shortness of breath, Diarrhoea, Nausea, Allergic reactions

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

Treat symptomatically.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding

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environment.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

The following may develop in event of fire: sulfur oxides., Sodium oxides.

Risk of dust explosion.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Do not breathe vapours/dust.

Further information on handling

Observe label precautions.

Use barrier skin cream.

Recommended preventive skin protection

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry place.

Advice on storage compatibility

Incompatible with strong acids and oxidizing agents.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

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Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	white
Odour:	sulphurous

Test method

pH-Value (at 20 °C):	3,04 (5 % solution)
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Changes in the physical state

Melting point:	55 °C	Decomposition temperature
Initial boiling point and boiling range:	not applicable	
Sublimation point:	not applicable	
Softening point:	not applicable	
Flash point:	not applicable	

Flammability

Solid:	no data available
Gas:	no data available

Explosive properties

no data available

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	>200 °C

Auto-ignition temperature

Solid:	no data available
Gas:	no data available

Decomposition temperature:	>80 °C
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Oxidizing properties

no data available

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Vapour pressure:	not applicable
Density (at 20 °C):	2,2 g/cm ³
Bulk density:	1250 kg/m ³
Water solubility: (at 20 °C)	moderately soluble
Solubility in other solvents	
no data available	
Partition coefficient:	not applicable
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Flow time:	not applicable
Vapour density:	not applicable
Evaporation rate:	not applicable
Solvent separation test:	not applicable
Solvent content:	not applicable

9.2. Other information

Solid content:	no data available
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SECTION 10: Stability and reactivity

10.1. Reactivity

Risk of dust explosion.
Potential for spontaneous combustion.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Reacts with the following substances: Acids, Oxidizing agents

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.
Exposure to moisture.
Exposure to water vapour.

10.5. Incompatible materials

Acids, Oxidizing agents, Water

10.6. Hazardous decomposition products

Sulphur oxides, Carbon monoxide, Carbon dioxide (CO₂)
Contact with acids liberates toxic gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

LD₅₀/oral/rat = 500 mg/kg

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CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
7775-14-6	sodium dithionite, sodium hydrosulphite				
	oral	ATE	500 mg/kg		

Irritation and corrosivity

Moderate eye irritation

Sensitising effects

May produce an allergic reaction.

STOT-single exposure

This information is not available.

Severe effects after repeated or prolonged exposure

This information is not available.

Carcinogenic/mutagenic/toxic effects for reproduction

This information is not available.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No toxicology information is available.

Additional information on tests

Harmful if swallowed.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information
12.1. Toxicity

No data is available on the product itself.

12.2. Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Bioaccumulation : According to experience not expected

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

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- 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product

- 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging

- 160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

SECTION 14: Transport information**Land transport (ADR/RID)**

- 14.1. UN number:** UN 1384
14.2. UN proper shipping name: Sodium dithionite
14.3. Transport hazard class(es): 4.2
14.4. Packing group: II

Inland waterways transport (ADN)

- Other applicable information (inland waterways transport)**
Not tested

Marine transport (IMDG)

- 14.1. UN number:** UN 1384
14.2. UN proper shipping name: Sodium dithionite
14.3. Transport hazard class(es): 4.2
14.4. Packing group: II
Marine pollutant: --
EmS: F-A,S-J

Air transport (ICAO)

- 14.1. UN number:** UN 1384
14.2. UN proper shipping name: Sodium dithionite
14.3. Transport hazard class(es): 4.2
14.4. Packing group: II

14.5. Environmental hazards

- ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant

Other applicable information

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package

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group II, EMS Code: F-A, S-P

These transport data apply to the entire pack

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

Classification according to EU Directives 67/548/EEC or 1999/45/EC

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

National regulatory information

Employment restrictions:

Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D):

1 - slightly water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

Safety datasheet sections which have been updated: 11

Relevant H- and EUH-phrases (Number and full text)

H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
EUH031	Contact with acids liberates toxic gas.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.