

Safety Data Sheet

according to Regulation (EC) No 1907/2006

26036-49 Porphyrin 2 Reagent

Revision date: 12.11.2014

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

CAS No: 7775-14-6
Index No: 016-028-00-1
EC No: 231-890-0

1.2. Relevant identified uses of the substance or mixture and uses advised against**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
Unit 1, Chestnut Road Western Industrial Estate
Dublin 12 - Ireland
Tel. +353 (0)1 4602522 * +353 (0)1 4509337
info-ie@hach.com

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Self-heating substance or mixture: Self-heat. 1

Acute toxicity: Acute Tox. 4

Serious eye damage/eye irritation: Eye Irrit. 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Self-heating: may catch fire.

Harmful if swallowed.

Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

sodium dithionite, sodium hydrosulphite

Signal word: Danger**Pictograms:****Hazard statements**

H251 Self-heating: may catch fire.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Additional advice on labelling

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, Eye Irrit. 2, Aquatic Chronic 3; H251 H302 H319 H412 EUH031			

Full text of H and EUH statements: 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**

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Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

, 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.

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.

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.

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.

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Eye/face protection

Safety glasses with side-shields

Hand protection

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

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	
Pour 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

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

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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

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7775-14-6	sodium dithionite, sodium hydrosulphite				
	oral	LD ₅₀ 2500 mg/kg	rat		

Irritation and corrosivity

May cause eye irritation.

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Sensitising effects

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

STOT-single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

STOT-repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No toxicology information is available.

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.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7775-14-6	sodium dithionite, sodium hydrosulphite					
	Acute fish toxicity	LC50 mg/l	46-68	96 h	Leuciscus idus (Golden orfe)	
	Acute crustacea toxicity	EC50	98 mg/l	48 h	Daphnia magna (Water flea)	

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

Waste disposal number of waste from residues/unused products

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

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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 hazardous substances, including mixtures of laboratory chemicals; 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

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-TI/IATA-DGR)

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 Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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**

Revision: 25.01.2017
Safety datasheet sections which have been updated: 2, 3, 11, 15
Safety datasheet sections which have been updated: 11

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Relevant H and EUH statements (number and full text)

H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
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.