

according to Regulation (EC) No 1907/2006

1995-49 Molybdate 3 Reagent for Silica

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

1.1. Product identifier

1995-49 Molybdate 3 Reagent for Silica

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.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

<u>1.4. Emergency telephone</u> Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

sulphuric acid ... % sodium hydrogensulphate Molybdic acid

Signal word: Danger

Pictograms:







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Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

or shower.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER/doctor.

Additional advice on labelling

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

2.3. Other hazards

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification according to Regulation (EC) No. 1272/2008 [CLP]					
7732-18-5	Water					
	231-791-2					
7664-93-9	sulphuric acid %					
	231-639-5	016-020-00-8				
	Skin Corr. 1A; H314					
10034-88-5	sodium hydrogensulphate					
	231-665-7	016-046-00-X				
	Eye Dam. 1; H318					
7782-91-4	Molybdic acid					
	231-970-5					
	Eye Irrit. 2, STOT SE 3, STOT RE 1; H319 H335 H372					

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 contaminated clothing and shoes immediately. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air. Consult a physician.





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After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. 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.

After ingestion

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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

Irritation and corrosion

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

Water, Carbon dioxide (CO2), Dry chemical

Unsuitable extinguishing media

No Limit

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. 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

Soak up with inert absorbent material and dispose of as hazardous waste.

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 and eyes. Avoid contact with clothing. Do not breathe vapours/dust. Provide sufficient air exchange and/or exhaust in work rooms.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep at temperatures between 10 and 25 °C.

Hints on joint storage

Do not store together with Oxidizing agents, Solvent





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7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL

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.

Wash hands before breaks and at the end of workday.

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

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

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: liquid

Colour: colourless, light yellow

Odour: none

pH-Value (at 20 °C): < 0,5

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

not applicable
not applicable
not applicable
not applicable



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Flash point: > 100 °C

Sustaining combustion: No data available

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

Auto-ignition temperature

Solid: not applicable
Gas: not applicable

Decomposition temperature: not applicable

Oxidizing properties

not applicable

Vapour pressure:

Vapour pressure:

no data available

no data available

Density (at 20 °C):

Bulk density:

no data available

vater solubility:

soluble

(at 20 °C)

Solubility in other solvents

Acids

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available Flow time: no data available Vapour density: no data available Evaporation rate: no data available Solvent separation test: no data available no data available Solvent content:

9.2. Other information

Solid content: not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.



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10.5. Incompatible materials

Incompatible with strong bases and oxidizing agents.

10.6. Hazardous decomposition products

Sulphur oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

Angaben zur Toxikologie liegen nicht vor.

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
10034-88-5	sodium hydrogensulphate						
	oral	LD50 mg/kg	2490	rat	IUCLID		

Irritation and corrosivity

Causes skin and eye burns.

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 not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

H372 - Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

sulphuric acid ... %: LD50/oral/rat = 2140mg/kg; LC50/inhalation/1h/mouse = 347ppm

sodium hydrogensulphate: LD50/oral/rat = 2828mg/kg

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
10034-88-5	sodium hydrogensulphate					
	Acute crustacea toxicity	EC50 190 mg/l		Daphnia magna (Water flea)	IUCLID	

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential



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no data available

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

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

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

Contaminated packaging

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3264

14.2. UN proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (Sulphuric Acid/Sodium

Bisulphate solution)

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Classification code: C1
Special Provisions: 274
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested





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Marine transport (IMDG)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Marine pollutant:

Special Provisions: 223, 274
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A803

1 L

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Use personal protective equipment.

14.7. Transport in bulk according to Annex II of Marpol 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 Number3316, Package 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

National regulatory information



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Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 2.02.2017

Safety datasheet sections which have been updated: 2, 11

Revision: 24.07.2015

Safety datasheet sections which have been updated: 8,.11,.14

Revision: 13.05.2015

Safety datasheet sections which have been updated: 2

Relevant H and EUH statements (number and full text)

 H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exponents. 	H290	May be corrosive to metals.
H319 Causes serious eye irritation. H335 May cause respiratory irritation.	H314	Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.	H318	Causes serious eye damage.
, , ,	H319	Causes serious eye irritation.
H372 Causes damage to organs through prolonged or repeated expo	H335	May cause respiratory irritation.
	H372	Causes damage to organs through prolonged or repeated exposure.

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)