

Safety Data Sheet

according to Regulation (EC) No 1907/2006

25998-49 Molybdate Reagent Solution

Revision date: 12.06.2017

Product code: 2599849

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

1.1. Product identifier

25998-49 Molybdate Reagent Solution

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

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

Regulation (EC) No. 1272/2008

Hazard categories:

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

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

sulphuric 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.

Precautionary statements

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

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			60-70%
	231-791-2			
7664-93-9	sulphuric acid ... %			30-35%
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			
12027-67-7	Ammonium heptamolybdate			1-5%
	234-722-4			
	Acute Tox. 4, Eye Irrit. 2; H302 H319			

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.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Call a physician immediately.

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

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person. Call a physician immediately.

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

Carbon dioxide (CO₂), Dry chemical

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

Unsuitable extinguishing media

Water

5.2. Special hazards arising from the substance or mixture

The following may develop in event of fire: sulfur oxides., nitrogen oxides (NO_x), Ammonia

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

Avoid subsoil penetration.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container 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 and eyes. Avoid contact with clothing. Do not breathe vapours or spray mist.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry and well-ventilated place.

Hints on joint storage

Do not store together with Oxidizing agents, Solvent, Metals

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	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

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

Protective and hygiene measures

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

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless, light blue
Odour:	sulphurous
pH-Value (at 20 °C):	< 0,5

Changes in the physical state

Melting point:	no data available
Initial boiling point and boiling range:	111 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

Auto-ignition temperature

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Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not applicable
Oxidizing properties	
not applicable	
Vapour pressure:	no data available
Density (at 20 °C):	1,285 g/cm ³
Bulk density:	not applicable
Water solubility: (at 20 °C)	soluble
Solubility in other solvents	
Acids : soluble	
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
Solvent content:	no data available

9.2. Other information

Solid content:	not applicable
Corrosive in contact with metals	

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

Reacts with the following substances: Oxidizing agents

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Incompatible with strong bases and oxidizing agents.
Gives off hydrogen by reaction with metals.

10.6. Hazardous decomposition products

Sulphur oxides, nitrogen oxides (NOx), Ammonia

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

No data is available on the product itself.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
12027-67-7	Ammonium heptamolybdate				
	oral	LD50 mg/kg	333	rat	

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

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

sulphuric acid ... %: LD50/oral/rat = 2140 mg/kg

Additional information on tests

None known.

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.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
12027-67-7	Ammonium heptamolybdate					
	Acute fish toxicity	LC50	2,6 mg/l	96 h		

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

SECTION 13: Disposal considerations
13.1. Waste treatment methods

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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

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. (<45% Sulphuric acid solution)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard 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

Marine transport (IMDG)

14.1. UN number: UN 3264
14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (<45% Sulphuric acid solution)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Marine pollutant: -
Special Provisions: 223, 274
Limited quantity: 5 L
Excepted quantity: E1

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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. (<45% Sulphuric acid solution)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Special Provisions: A3 A803
Limited quantity Passenger: 1 L
Passenger LQ: Y841
Excepted quantity: E1
IATA-packing instructions - Passenger: 852
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 856
IATA-max. quantity - Cargo: 60 L

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

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 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**

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

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

SECTION 16: Other information**Changes**

Revision: 12.06.2017
Safety datasheet sections which have been updated: 2, 7, 11,
Revision: 12.09.2016
Safety datasheet sections which have been updated: 2, 8, 11,

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Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.

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.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

25999-49 Ascorbic Acid Reagent Dilution Solution

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

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****Regulation (EC) No. 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements**Additional advice on labelling**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			> 95 %
	231-791-2			
64-18-6	formic acid ... %			< 1 %
	200-579-1	607-001-00-0		
	Skin Corr. 1A; H314			

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 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.

After ingestion

Drink 1 or 2 glasses of water.

Call a physician immediately.

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

No known effect.

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 environment. The product itself does not burn. Extinguishing media: Water

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

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.

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6.3. Methods and material for containment and cleaning up

Cover with dry sodium carbonate. Neutralize with hydrochloric or sulphuric acids. Sweep up or vacuum up spillage and collect in suitable container for disposal. Dispose of contents/container in accordance with local regulation. Mark the contaminated area with signs and prevent access to unauthorized personnel.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

General hygiene considerations Use only in well-ventilated areas.
Avoid contact with skin and eyes.

Advice on protection against fire and explosion

See also section 5

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry, cool place.

Hints on joint storage

Incompatible with strong bases and oxidizing agents.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-18-6	Formic acid	5	9.6		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 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

Remove and wash contaminated clothing before re-use.

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Respiratory protection

Provide adequate ventilation.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless
Odour:	sulphurous
pH-Value (at 20 °C):	2,27

Changes in the physical state

Melting point:	not applicable
Initial boiling point and boiling range:	99,5 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	no data available
:	no data available
Flash point:	> 200 °C
Sustaining combustion:	No data available

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not applicable
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Oxidizing properties

not applicable

Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	0,998 g/cm ³
Bulk density:	not applicable
Water solubility: (at 20 °C)	completely soluble

Solubility in other solvents

N09.00602560

Partition coefficient:	no data available
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Flow time:	not applicable
Vapour density:	no data available

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Evaporation rate: no data available
Solvent separation test: no data available
Solvent content: no data available

9.2. Other information

Solid content: not applicable
no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Incompatible with oxidizing agents. Incompatible with bases.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxidizing agents
Bases

10.6. Hazardous decomposition products

Carbon oxides, Carbon monoxide

Further information

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data is available on the product itself.

Irritation and corrosivity

No known effect.

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

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 data is available on the product itself.

Additional information on tests

None known.

Practical experience

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Observations relevant to classification

no data available

Other observations

None known.

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.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-18-6	formic acid ... %					
	Acute fish toxicity	LC50 mg/l	46 - 100	96 h	Leuciscus idus	IUCLID
	Acute algae toxicity	ErC50	27 mg/l	72 h	Desmodesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	34,2	48 h	Daphnia magna	IUCLID

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

no data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-18-6	formic acid ... %	-0,54

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

Further information

no data available

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

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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 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.

SECTION 14: Transport information

Land transport (ADR/RID)**Other applicable information (land transport)**

Not subject to transport regulations.

Inland waterways transport (ADN)**Other applicable information (inland waterways transport)**

Not tested

Marine transport (IMDG)**Other applicable information (marine transport)**

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)**Other applicable information (air transport)**

Not subject to transport regulations.

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

Other applicable information

no data available

SECTION 15: Regulatory information

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

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: 13.02.2017

Safety datasheet sections which have been updated: 10

Revision: 11.11.2015

Safety datasheet sections which have been updated: 1-16

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

25999-49 Ascorbic Acid Reagent Dilution Solution

Revision date: 13.02.2017

Product code: 2599949

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Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.

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.)

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according to Regulation (EC) No 1907/2006

2651255 Ascorbic Acid Reagent Powder

Revision date: 01.08.2016

Product code: 2651255

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

2651255 Ascorbic Acid Reagent Powder

CAS No: 50-81-7

EC No: 200-066-2

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

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****Regulation (EC) No. 1272/2008**

This substance is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

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

2.2. Label elements**Additional advice on labelling**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients**3.1. Substances**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
50-81-7	Ascorbic acid			100 %
	200-066-2			

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.

After contact with skin

Wash off immediately with soap and 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.

After ingestion

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

No known effect.

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 environment.

5.2. Special hazards arising from the substance or mixture

The following may develop in event of fire: sulfur oxides., Carbon monoxide, Carbon dioxide (CO2)

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.

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6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container 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 and eyes.

Do not breathe vapours/dust.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry and well-ventilated place.

Hints on joint storage

Incompatible with oxidizing agents.

Further information on storage conditions

Sensitivity to light

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

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

Protective and hygiene measures

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

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation.

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	solid
Colour:	white
Odour:	odourless
pH-Value (at 20 °C):	2,3 (5 % solution)

Changes in the physical state

Melting point:	192 °C
Initial boiling point and boiling range:	not applicable
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable
Sustaining combustion:	No data available

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: no data available

Oxidizing properties

not applicable

Vapour pressure:	no data available
Vapour pressure:	no data available

Density (at 20 °C): 1,65 g/cm³

Bulk density: no data available

Water solubility:
(at 20 °C) soluble**Solubility in other solvents**

Alcohol

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

9.2. Other information

Solid content: no data available

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SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.
Exposure to moisture.

10.5. Incompatible materials

Bases, Oxidizing agents, Copper, Iron

10.6. Hazardous decomposition products

Carbon dioxide (CO₂), Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.
No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
50-81-7	Ascorbic acid				
	oral	LD50 mg/kg	11900	rat	RTECS

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No toxicology information is available.

Further information

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.

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12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

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

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

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

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

The product does not need to be labelled in accordance with EC directives or respective national laws.

National regulatory information

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: 01.08.2016

Safety datasheet sections which have been updated: 1-16

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.