

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 1 of 9

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

1790-49 Hydrazine Reagent, HydraVer2

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

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

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

sulphuric acid ... %

4-(Dimethylamino)-benzaldehyde

Triton X-114

Signal word: Danger

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 2 of 9

Pictograms:



Hazard statements

- H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P310 Immediately call a POISON CENTER/doctor.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 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.

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			60-65 %
	231-791-2			
7664-93-9	sulphuric acid ... %			25-35 %
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			
100-10-7	4-(Dimethylamino)-benzaldehyde			3-10 %
	202-819-0			
	Acute Tox. 4, Skin Sens. 1, Aquatic Chronic 3; H302 H317 H412			
9036-19-5	Triton X-114			< 0,5 %
	-			
	Acute Tox. 4, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1 (M-Factor = 1); H302 H318 H400 H410			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 3 of 9

General information

Take off all contaminated clothing 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. Consult a physician.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

After contact with eyes

Rinse immediately with plenty of water for at least 15 minutes. Call a physician immediately.

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.

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

Irritation and corrosion, Cough, Shortness of breath

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.

Unsuitable extinguishing media

Water

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.
Gives off hydrogen by reaction with metals. Reacts violently with water.
Fire may liberate hazardous vapours.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 4 of 9

Advice on safe handling

Avoid contact with skin and eyes.
Do not breathe vapours or spray mist. Use only in well-ventilated areas.

Further information on handling

Observe label precautions.

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.
Keep at temperatures between 10 and 25 °C.

Hints on joint storage

Protect against Bases, Oxidizing agents, Metals

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/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 0.40 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:	yellow	
Odour:	irritating	
pH-Value (at 20 °C):		< 0,5

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 5 of 9

Changes in the physical state

Melting point:	no data available
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

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):	1,26 g/cm ³
Bulk density:	not applicable
Water solubility:	soluble

Solubility in other solvents

no data available

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:	no data available
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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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 6 of 9

Reacts with the following substances: Alkali metals, Alkaline earth metals, Metals, Bases

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Decomposes on heating.

10.5. Incompatible materials

Bases, Oxidizing agents

10.6. Hazardous decomposition products

Gives off hydrogen by reaction with metals.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
100-10-7	4-(Dimethylamino)-benzaldehyde				
	oral	LD50 mg/kg	>6400	rat	
9036-19-5	Triton X-114				
	oral	LD50 mg/kg	1700	rat	

Irritation and corrosivity

The product causes burns of eyes, skin and mucous membranes.

Sensitising effects

May cause sensitisation by skin contact.

Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

STOT-single exposure

No known effect.

STOT-repeated exposure

No known effect.

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 7 of 9

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
100-10-7	4-(Dimethylamino)-benzaldehyde					
	Acute fish toxicity	LC50 mg/l	45,7	96 h		
9036-19-5	Triton X-114					
	Acute fish toxicity	LC50 mg/l	4-8,9	96 h	Pimephales promelas (fathead minnow)	
	Acute crustacea toxicity	EC50 mg/l	18-26	48 h	Daphnia magna (Water flea)	
	Fish toxicity	NOEC mg/l	0,004	7 d	Oncorhynchus mykiss (rainbow trout)	EPA

12.2. Persistence and degradability

No data is available on the product itself.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
9036-19-5	Triton X-114				
	OECD Test Guideline 301 C	22%	28		

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)

14.1. UN number:

UN 2796

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 8 of 9

14.2. UN proper shipping name: Sulphuric acid solution**14.3. Transport hazard class(es):** 8**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 2796**14.2. UN proper shipping name:** Sulphuric acid solution**14.3. Transport hazard class(es):** 8**14.4. Packing group:** II

Marine pollutant: --

EmS: F-A,S-B

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:** UN 2796**14.2. UN proper shipping name:** Sulphuric acid solution**14.3. Transport hazard class(es):** 8**14.4. Packing group:** II**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Triton X-114

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 applicable

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).

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: 7.09.2017

Safety datasheet sections which have been updated: 2, 3, 14

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1790-49 Hydrazine Reagent, HydraVer2

Revision date: 07.09.2017

Product code: 179049

Page 9 of 9

Revision: 30.04.2015

Safety datasheet sections which have been updated: 2, 4, 11

This data sheet contains changes from the previous version in section(s): 15

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
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.)