

Safety Data Sheet

according to Regulation (EC) No 1907/2006

22369-45 Water in Oil Reagent Set

Revision date: 03.05.2019

Product code: 2236945

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

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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 and mixture which, in contact with water, emits flammable gas: Water-react. 1

Flammable liquid: Flam. Liq. 2

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

In contact with water releases flammable gases which may ignite spontaneously.

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause drowsiness or dizziness.

Very toxic to aquatic life with long lasting effects.

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

2,2,4-trimethylpentane

Signal word: Danger

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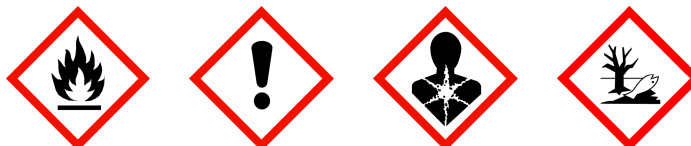
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Pictograms:**Hazard statements**

H225	Highly flammable liquid and vapour.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P332+P313	If skin irritation occurs: Get medical advice/attention.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P273	Avoid release to the environment.
P391	Collect spillage.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P405	Store locked up.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P403+P235	Store in a well-ventilated place. Keep cool.
P223	Do not allow contact with water.
P231+P232	Handle and store contents under inert gas. Protect from moisture.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P335+P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P370+P378	In case of fire: Use Dry sand, Alcohol-resistant foam, Dry chemical to extinguish.
P402+P404	Store in a dry place. Store in a closed container.

Special labelling of certain mixtures

Restricted to professional users.

Additional advice on labelling

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

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	
	GHS Classification			
540-84-1	2,2,4-trimethylpentane			90,0 - 100,0 %
	208-759-1	601-009-00-8		
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			
7789-78-8	calcium hydride			5 - 10 %
	232-189-2	001-004-00-5		
	Water-react. 1; H260			

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. Call a physician immediately.
Artificial respiration and/or oxygen may be necessary.

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

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.

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

May be fatal if swallowed. May be fatal if inhaled.
May cause skin irritation. May cause eye irritation.
Highly flammable.

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

Unsuitable extinguishing media

Highly flammable.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

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

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. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.
Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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

Use only in well-ventilated areas. Avoid contact with skin and eyes.
Do not breathe vapours/dust.
General industrial hygiene practice.

Advice on protection against fire and explosion

See also section 5.

Further information on handling

Avoid contact with skin, eyes and clothing.

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

Keep away from heat and sources of ignition.

Further information on storage conditions

Keep locked up or in an area accessible only to qualified or authorised persons.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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.
Ensure that eye flushing systems and safety showers are located close to the working place.
Use only in area provided with appropriate exhaust ventilation.
Keep away from heat.

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Eye/face protection

Safety glasses with side-shields

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In the case of vapour formation use a respirator with an approved filter.

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	hydrocarbon-like
pH-Value:	not applicable

Changes in the physical state

Melting point:	no data available
Initial boiling point and boiling range:	~100 °C
Sublimation point:	no data available
Softening point:	no data available
Pour point:	no data available
:	no data available
Flash point:	-12 °C
Sustaining combustion:	No data available

Flammability

Solid:	no data available
Gas:	no data available
Lower explosion limits:	1,1 vol. %
Upper explosion limits:	6,0 vol. %
Ignition temperature:	418 °C

Auto-ignition temperature

Solid:	418 °C
Gas:	no data available
Decomposition temperature:	no data available

Oxidizing properties

no data available

Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	0,69 g/cm ³
Bulk density:	no data available
Water solubility:	no data available

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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

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with water.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No hazardous decomposition products are known.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

Mixture reacts slowly with water resulting in evolution of hydrogen.

Further information

Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

Harmful by inhalation and if swallowed.

Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: 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

May cause drowsiness or dizziness. (2,2,4-trimethylpentane)

STOT-repeated exposure

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

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Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

None known.

Additional information on tests

None known.

Practical experience**Observations relevant to classification**

Irritation and corrosion

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 information on ecology is available.

Do not flush into surface water or sanitary sewer system.

12.2. Persistence and degradability

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

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

Discharge into the environment must be avoided.

Further information

No known effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods**Disposal recommendations**

In accordance with local and national regulations. Our local agencies will accept used cuvettes to ensure their proper disposal.

List of Wastes Code - 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

List of Wastes Code - 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

List of Wastes Code - contaminated packaging

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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

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 3482
14.2. UN proper shipping name: ALKALINE EARTH METAL DISPERSION, FLAMMABLE
14.3. Transport hazard class(es): 4.3
14.4. Packing group: I
Hazard label: 4.3+3




Classification code: WF1
Special Provisions: 182 183 506
Limited quantity: 0
Excepted quantity: E0
Transport category: 1
Hazard No: X323
Tunnel restriction code: B/E

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)
Not tested

Marine transport (IMDG)

14.1. UN number: UN 3482
14.2. UN proper shipping name: ALKALINE EARTH METAL DISPERSION, FLAMMABLE
14.3. Transport hazard class(es): 4.3
14.4. Packing group: I
Hazard label: 4.3+3



Marine pollutant: -
Special Provisions: 182, 183
Limited quantity: 0
Excepted quantity: E0
EmS: F-G, S-N

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3482
14.2. UN proper shipping name: ALKALINE EARTH METAL DISPERSION, FLAMMABLE
14.3. Transport hazard class(es): 4.3
14.4. Packing group: I
Hazard label: 4.3+3

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Special Provisions:	A84	
Limited quantity Passenger:	Forbidden	
Passenger LQ:	Forbidden	
Excepted quantity:	E0	
IATA-packing instructions - Passenger:		Forbidden
IATA-max. quantity - Passenger:		Forbidden
IATA-packing instructions - Cargo:		480
IATA-max. quantity - Cargo:		1L

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

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 hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information**Changes**

Revision: 27.10.2015

Safety datasheet sections which have been updated: 1 - 16

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance 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.)