



according to Regulation (EC) No 1907/2006

2493023 Blanking Reagent for Ultra Low Range Chlorine

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

1.1. Product identifier

2493023 Blanking Reagent for Ultra Low Range Chlorine

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

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

service number:

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

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

May be corrosive to metals. May cause respiratory irritation.

Causes severe skin burns and eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Malonic acid

Signal word: Danger

Pictograms:





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Hazard statements

H290 May be corrosive to metals.
H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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.

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

P310 Immediately call a POISON CENTER/doctor.
P390 Absorb spillage to prevent material damage.
P501 Dispose of contents/container to Disposal.

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			
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			
	231-791-2			
141-82-2	Malonic acid			
	205-503-0			
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, STOT SE 3; H332 H302 H319 H335			

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.

If symptoms persist, call a physician.

After contact with skin

Wash off immediately with plenty of water.

Take off all contaminated clothing immediately.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.





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After ingestion

Clean mouth with water and drink afterwards plenty of water.

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Unsuitable extinguishing media

None known.

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.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material.

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.

Advice on protection against fire and explosion

See also section 5

Further information on handling

Observe label precautions.

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

None known.





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Further information on storage conditions

Keep away from heat.

7.3. Specific end use(s)

Reagent for analysis

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.

Handle in accordance with good industrial hygiene and safety practice.

Protective and hygiene measures

Wash hands before breaks and after work.

General industrial hygiene practice.

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 and eyes.

Respiratory protection

Provide adequate ventilation.

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: odourless

pH-Value (at 23 °C): 0,54

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

no data available

no data available

Flash point:

not applicable

no data available

> 100 °C

Flammability

Solid: no data available





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Gas: no data available

Explosive properties

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

Auto-ignition temperature

Solid: no data available
Gas: no data available
Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure:

No data available

Vapour pressure:

Density (at 20 °C):

Bulk density:

Not applicable

Water solubility:

(at 20 °C)

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

9.2. Other information

Solid content: no data available

no data available

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

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.



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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
141-82-2	Malonic acid					
	oral	LD50 mg/kg	1310	rat		
	inhalation vapour	ATE	11 mg/l			
	inhalation (1 h) aerosol	LC50 mg/l	8,989	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 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 data is available on the product itself.

Additional information on tests

None known.

Practical experience

Observations relevant to classification

None known.

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.



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CAS No	Chemical name	Chemical name					
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
141-82-2	-2 Malonic acid						
	Acute fish toxicity	LC50	150 mg/l		Lepomis macrochirus (Bluegill sunfish)		
	Acute crustacea toxicity	EC50	275 mg/l		Daphnia magna (Water flea) Lepomis macrochirus (Bluegill sunfish)		

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 data available

Further information

Ecological injuries are not known or expected under normal use.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Dispose of in accordance with the European Directives on waste and 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: UN3265

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Malonic acid solution)

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



Classification code: C3
Special Provisions: 274
Limited quantity: 5 L
Transport category: 3
Hazard No: 80
Tunnel restriction code: E





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Other applicable information (land transport)

Excepted Quantities: E1

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

14.1. UN number: UN3265

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Malonic acid solution)

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



Marine pollutant:

Special Provisions:223, 274Limited quantity:5 LEmS:F-A, S-BSegregation group:acids

Other applicable information (marine transport)

Excepted Quantities: E1

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN3265

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Malonic acid solution)

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



Special Provisions: A3 A803 Limited quantity Passenger: 1 L

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

Other applicable information (air transport)

Excepted Quantities: E1 Passenger-LQ: Y841

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



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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

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

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

SECTION 16: Other information

Changes

Revision: 23.09.2015

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

Revision: 03.04.2013

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.

H332 Harmful if inhaled.

H335 May cause respiratory 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.)