

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Issue Date 04-Jul-2005 Revision Date 14-Feb-2023 Version 3.9

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s) 2340249

Product Name Nitrite Standard Solution 250 mg/L as NO₂-N

Unique Formula Identifier (UFI) 69UX-66F3-1302-944Q

Molecular weight No data available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Standard solution. Water Analysis.

Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Supplier

HACH UK
Laser House
Ground Floor, Suite B
Waterfront Quay, Salford Quays
GB - Manchester, M50 3XW
Tel. +44 (0) 161 872 1487
info-uk@hach.com

HACH Ireland Unit 34 GB Business Park Little Island IRL-Co. Cork T45 H681 Tel. +353 (0)146 02 522 info-ie@hach.com

1.4. Emergency telephone number

UK: Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity Category 2 - (H411)

2.2. Label elements

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Signal word

Warning

Hazard statements

H351 - Suspected of causing cancer

H361 - Suspected of damaging fertility or the unborn child

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use

P273 - Avoid release to the environment

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P391 - Collect spillage

P405 - Store locked up

P501 - Dispose of contents/container to industrial incineration plant

2.3. Other hazards

No information available.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT)

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Chloroform	67-66-3 200-663-8 602-006-00-4	<1%	Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Acute Tox. 3 - H331 Carc. 2 - H351 Repr. 2 - H361d STOT RE 1 - H372	-	-	-
Sodium nitrite	7632-00-0 (007-010-00-4) 231-555-9	<1%	Ox. Sol. 3 - H272 Acute Tox. 3 - H301 Eye Irrit. 2 - H319	-	1	1

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Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
	007-010-00-4		Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate If LD50/LC50 data is not available or does not correspond to the classification

category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based

on its components

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Chloroform 67-66-3	695 mg/kg	None reported	47.702 mg/L	None reported	None reported
Sodium nitrite 7632-00-0	85 mg/kg	None reported	5.5 mg/L	None reported	None reported

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Take off contaminated clothing and

shoes immediately.

Inhalation Remove to fresh air. If symptoms persist, call a doctor.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a doctor.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a

doctor.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: FIREFIGHTING MEASURES

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5.1. Extinguishing media

surrounding environment. Dry chemical, CO2, alcohol-resistant foam or water spray.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous combustion products This material will not burn.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection 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

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Evacuate personnel

to safe areas.

6.2. Environmental precautions

Environmental precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Take off contaminated

clothing and wash it before reuse.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid breathing

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dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes or clothing. Wash

thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Specific use(s) Analytical reagent.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	Ireland
Chloroform	TWA: 2 ppm	TWA: 2 ppm	TWA: 2 ppm
67-66-3	TWA: 10 mg/m ³	TWA: 9.9 mg/m ³	TWA: 9.8 mg/m ³
	*	STEL: 6 ppm	STEL: 6 ppm
		STEL: 29.7 mg/m ³	STEL: 29.4 mg/m ³
		Sk*	Sk*

Biological occupational exposure limits

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration

(PNEC)

No information available.

Additional information No information available.

8.2. Exposure controls

Engineering controls Technical measures and appropriate working operations should be given priority over the

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

workplace.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection Barrier creams may help to protect the exposed areas of skin. Wear suitable gloves. Gloves

must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco.

Gloves							
Duration of contact	PPE - Glove material	Glove thickness	Break through time				
Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes				
Long term (repeated)	Wear protective Viton™ gloves	0,70 mm	>480 minutes				

Skin and body protection Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse. Long

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sleeved clothing.

Respiratory protection Ensure adequate ventilation. No protective equipment is needed under normal use

conditions. If exposure limits are exceeded or irritation is experienced, ventilation and

evacuation may be required. Wear breathing apparatus if exposed to

vapours/dusts/aerosols.

Recommended filter type: ABEK-P3.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid breathing

dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes or clothing. Wash

thoroughly after handling.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Liquid

Colour colourless Odour Odourless

or clear

Odour threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight No data available

pH 7.01 @ 20 °C

Melting point / freezing point $\sim 0 \, ^{\circ}\text{C} \, / \, 32 \, ^{\circ}\text{F}$

Initial boiling point and boiling range ~ 100 °C / 212 °F

Evaporation rate 1 (water = 1)

Vapour pressure 24.002 mm Hg $\,/\,$ 3.2 kPa at 25 °C $\,/\,$ 77 °F

Relative vapor density 0.62

Specific Gravity 0.99

Partition coefficient Not applicable

Soil Organic Carbon-Water Partition

Coefficient

Not applicable

Autoignition temperature No data available

Decomposition temperature No data available

Dynamic viscosity 1 cP (mPa s) at 20 °C / 68 °F

Kinematic viscosity 1.01 cSt (mm²/s) at 20 °C / 68 °F

Relative density 0.99 g/mL @ 20 °C

Solubility(ies)

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Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature_
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name_	Solubility classification	<u>Solubility</u>	Solubility Temperature_
None reported	No information available	No data available	No information available

Metal Corrosivity

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point No data available

Flammability

Upper flammability limit:No data availableLower flammability limitNo data available

Oxidising properties No data available.

Bulk density No data available

9.2. Other information

No information available.

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents. Strong acids. Strong bases.

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10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform	Rat LD ₅₀	695 mg/kg	None reported	None reported	GESTIS
Sodium nitrite	Rat LD ₅₀	85 mg/kg	None reported	None reported	IUCLID

Inhalation (Dust/Mist) Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform	Rat LC50	47.702 mg/L	4 hours	None reported	RTECS
Sodium nitrite	Rat LC ₅₀	5.5 mg/L	4 hours	None reported	LOLI

Inhalation (Vapor) Exposure Route:

Acute Toxicity Estimate (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	70,833.30 mg/kg
ATEmix (inhalation-dust/mist)	334.00 mg/l
ATEmix (inhalation-vapour)	2,000.00 mg/l

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

Skin corrosion/irritation

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

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform	Draize Test	Rabbit	None reported	None reported	Skin irritant	ECHA

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Sodium nitrite	OECD Test 404:	Rabbit	500 mg	24 hours	Not corrosive or	ECHA
	Acute Dermal				irritating to skin	
	Corrosion/Irritation					

Serious eye damage/eye irritation

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

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform	Draize Test	Rabbit	20 mg	24 hours	Eye irritant	RTECS
Sodium nitrite	Draize Test	Rabbit	500 mg	24 hours	Eye irritant	RTECS

Respiratory or skin sensitisation

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

Mixture No data available.

Substance Test data reported below.

Skin Sensitization Exposure Route:

Chemical name	Test method	Species	Results	Key literature references and sources for data
Chloroform	OECD Test No. 406: Skin Sensitisation	Guinea pig	No sensitisation responses were observed.	ECHA

STOT - single exposure

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

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Chloroform	Man	2514 mg/kg	None reported	Kidney, Ureter, or Bladder	RTECS
	LD∟₀			Changes in tubules (including	
				acute renal failure, acute tubular	
				necrosis)	
Sodium nitrite	Human	71 mg/kg	None reported	Blood	RTECS
	LD∟₀			Methemoglobinemia-Carboxyhe	
				moglobin	
				Gastrointestinal	
				Gas	

Inhalation (Vapor) Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform	Human TC _{Lo}	171 mg/L	4 hours	Behavioral Hallucinations, Distorted perceptions	RTECS

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STOT - repeated exposure

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

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform	Rat TD∟₀	540 mg/kg	3 days	Biochemical Intermediary metabolism (other proteins) Kidney, Ureter, or Bladder Changes in tubules (including acute renal failure, acute tubular necrosis)	
Sodium nitrite	Rat TD∟₀	110 mg/kg	22 days	None reported	RTECS

Inhalation (Dust/Mist) Exposure Route:

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Chloroform	Rat	90 mg/L	90 days	Kidney, Ureter, or Bladder	RTECS
	TCLo			Changes in tubules (including	
				acute renal failure, acute tubular	
				necrosis)	
				Liver	
				Hepatitis (hepatocellular	
				necrosis), diffuse	
				Nutritional and Gross	
				Metabolic	
				Weight loss or decreased weight	
				gain	
Sodium nitrite	Rat	0.0003 mg/L	30 days	Biochemical	RTECS
	TCLo			Enzyme inhibition, induction, or	
				change in blood or tissue levels	
				(phosphatases, catalases)	

Inhalation (Vapor) Exposure Route:

ſ	Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
		type	dose	time		sources for data
Ī	Chloroform	Human	0.010 mg/L	365 days	Gastrointestinal	RTECS
		TCLo		_	Nausea or vomiting	
					Other changes	

Germ cell mutagenicity

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

Mixture invitro **Data** No data available.

Substance invitro **Data** Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform	Mutation in	Salmonella	5%	24 hours	Negative	ECHA

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	microorganisms	typhimurium				
Sodium nitrite	Unscheduled DNA synthesis	Human HeLa Cell	6 mmol/L	None reported	Positive test result for mutagenicity	RTECS

Mixture invivo **Data**No data available.

Substance invivo **Data** Test data reported below.

Oral Exposure Route:

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform	Micronucleus test	Rat	480 mg/kg	5 days	Negative test result for mutagenicity	ECHA
Sodium nitrite	Cytogenetic analysis	Mouse	60 mg/kg	30 days	Positive test result for mutagenicity	RTECS

Carcinogenicity

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

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Chloroform	Carc. 2

Mixture No data available.

Substance Test data reported below.

Inhalation (Vapor) Exposure Route:

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Chloroform	Mouse	5 mg/L	2 years	Kidney, Ureter, or Bladder	ECHA
	NOAEL			Kidney tumors	

Reproductive toxicity

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

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Chloroform	Repr. 2

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Chloroform	Mouse	15.9 mg/kg	Multiple	Effects on Fertility	ECHA
	NOAEL		generations	Male fertility index (e.g.	
				Spermatogenesis (including	
				genetic material, sperm	
				morphology, motility, and count)	
Sodium nitrite	Rat	280 mg/kg	None reported	Effects on Embryo or Fetus	RTECS
	TDLo			Fetal death	
				Fetotoxicity (except death e.g.	
				stunted fetus)	

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Specific Developmental Abnormalities
Blood and lymphatic systems
(including spleen and marrow)

Inhalation (Vapor) Exposure Route:

Chem	ical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
		type	uose	tillie		Sources for data
Chl	oroform	Rat	3 mg/L	9 days	Effects on Embryo or Fetus	ECHA
		NOAEL			Fetotoxicity (except death e.g.	
					stunted fetus)	

Aspiration hazard

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

11.2 Information on other hazards

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects.

Unknown aquatic toxicityContains 0 % of components with unknown hazards to the aquatic environment.

<u>Mixture</u>

Acute aquatic toxicity: No data available.

Aquatic Chronic Toxicity: No data available.

Substance

Acute aquatic toxicity: Test data reported below.

Fish:

Chemical name	Exposure	Species	Endpoint type	Reported dose	Key literature references and
	time				sources for data
Sodium nitrite	96 hours	Salmo gairdneri	LC50	0.11 mg/L	ERMA

Crustacea:

Chemical name	Exposure	Species	Endpoint type	Reported dose	Key literature references and
	time				sources for data
Sodium nitrite	48 Hours	Cherax quadricarinatus	EC ₅₀	1.1 mg/L	ERMA

Aquatic Chronic Toxicity: Test data reported below.

Fish:

_						
-	Chemical name	Exposure	Species	Endpoint type	Reported dose	Key literature references and
- 1	Officialities frame	Exposure	Opecies	Linapoint type	irchortea aose	ricy interaction references and
-		time				sources for data
L						

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Chloroform	14 days	Oryzias latines	NOFC	1 463 mg/l	FCHA

12.2. Persistence and degradability

Mixture No data available.

12.3. Bioaccumulative potential

Mixture: No data available.

Partition coefficient Not applicable

12.4. Mobility in soil

Soil Organic Carbon-Water Partition Not

Coefficient

Not applicable

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Chloroform	The substance is not PBT / vPvB
Sodium nitrite	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available.

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on Disposal

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

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.

Contaminated packaging Dispose of contents/containers in accordance with local regulations.

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Other Information Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing GroupNot regulated14.5 Marine pollutantNot applicable

Environmental hazards Yes

14.6 Special precautions for user See section 6-8 for more information

14.7. Transport in bulk according to Not applicable

Annex II of MARPOL and the IBC

Code

ADR

14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing GroupNot regulated

14.5 Environmental hazards Yes

14.6 Special precautions for user See section 6-8 for more information

IATANot regulated14.1UN number or ID numberNot regulated14.2Proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated

14.5 Environmental hazards Yes

14.6 Special precautions for user See section 6-8 for more information

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

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

National regulations

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Chloroform - 67-66-3	32.	
	75.	
Sodium nitrite - 7632-00-0	75.	

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Persistent Organic Pollutants Not applicable

Export Notification requirements This product contains substances which are regulated pursuant to Regulation (EC) No.

649/2012 of the European parliament and of the council concerning the export and import of

dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex Number
Chloroform - 67-66-3	I.1

Dangerous substance category per Seveso Directive (2012/18/EU)

• E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Chloroform	RG 12	-
67-66-3	RG 5,RG 14,RG 15,RG	
	15bis,RG 20bis	
	RG 84	
	RG 20,RG 20bis,RG	
	26,RG 34,RG 65	
	RG 65	

International Inventories

EINECS/ELINCS Complies Complies **TSCA** Complies **DSL/NDSL** Complies **ENCS** Complies **IECSC KECL - Existing substances** Complies **PICCS** Complies **AICS** Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

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PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

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

Section 16: OTHER INFORMATION

 Issue Date
 04-Jul-2005

 Revision Date
 14-Feb-2023

Revision Note New SDS, SDS sections updated, 3, 9, 11, 12.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

** Hazard Designation

ADN Accord européen relatif au transport international des marchandises dangereuses par voies

de navigation intérieure

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE Acute Toxicity Estimate

CAS Chemical Abstracts Service Number

Ceiling Maximum limit value

CLP Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No.

1272/2008]

DNEL Derived No Effect Level (DNEL)

EC European Community

ECHA ECHA (The European Chemicals Agency)
EC50 Effective Concentration to 50% of a test population

EEC European Economic Community

EN European Standard

IMDG International Maritime Dangerous Goods (IMDG)
IATA International Air Transport Association (IATA)

IATA-DGR International Air Transport Association - Dangerous Goods Regulations

ICAO International Civil Aviation Organization

ICAO-TI International Civil Aviation Organization - Technical Instructions
IUCLID IUCLID (The International Uniform Chemical Information Database)
GHS Globally Harmonized System of Classification and Labelling of Chemicals

LOAEL Lowest observed adverse effect level

LOAEC Lowest observed adverse effect concentration LC50 Lethal Concentration to 50% of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
LOLI (List of Lists - An International Chemical Regulatory Database)

MAK Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit

value, which relates to safe daily exposure levels to chemical substances

NOAEL NOAEL (No observed adverse effect level)
NOAEC No observed adverse effect concentration

OSHA Occupational Safety and Health Administration of the US Department of Labour)

PEC Predicted Effect Concentration

PNEC Predicted No Effect Concentration (PNEC)

PBT Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No.

1907/2006])

RID Règlement international concernant le transport des marchandises dangereuses par chemin

de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

RTECS (Registry of Toxic Effects of Chemical Substances)

TWA TWA (time-weighted average)

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SKN* Skin designation SKN+ Skin sensitisation

STEL STEL (Short Term Exposure Limit)
STOT Specific Target Organ Toxicity

STOT RE Specific target organ toxicity — repeated exposure STOT SE Specific target organ toxicity — single exposure

SVHC Substances of Very High Concern

TLV Threshold Limit Value

TRGS Technical rules for hazardous substances, Germany

TSCA Toxic Substances Control Act

UN United Nations

vPvB very persistent and very bioaccumulative

VOC Volatile organic compounds

AwSV Administrative regulation of water polluting substances, Germany

Key literature references and sources for data

See Section 11: TOXICOLOGICAL INFORMATION See Section 12: ECOLOGICAL INFORMATION

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method

Full text of H-Statements referred to under section 3

H272 - May intensify fire; oxidiser

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

H361d - Suspected of damaging the unborn child

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Training Advice Take note of Directive 98/24/EC on the protection of the health and safety of workers from

the risks related to chemical agents at work

Restrictions on use For Laboratory Use Only.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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End of Safety Data Sheet

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