

according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 1 of 10

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

1.1. Product identifier

Demo pack Formalin System

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

Use of the substance/mixture

For demonstration purposes, only.

The demo pack includes a bag containing 450 ml demonstration solution.

Uses advised against

Not suited for tissue fixation.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name: SARSTEDT AG & Co. KG

Street: Sarstedtstraße 1
Place: D-51588 Nümbrecht

Post-office box: 1220

D-51582 Nümbrecht

Telephone: +49 (0)2293 / 305 - 0 Telefax: +49 (0)2293 / 305 - 2470

E-mail: info@sarstedt.com

Contact person: Dr. Daniel Will Telephone: +49 (0)2293 / 305 - 4500

Jochen Hoffmann

E-mail: sicherheitsdatenblatt@sarstedt.com

Internet: www.sarstedt.com
Responsible Department: R & D Center

Supplier

Company name: SARSTEDT Ltd.

Street: Optimus Way, Optimus Point

Place: GB-LE3 8JR Leicester

Telephone: +44 (0) 116 235 9023 Telefax: +44 (0) 116 236 6099

E-mail: info.gb@sarstedt.com
Internet: www.sarstedt.com

1.4. Emergency telephone Call NHS 111 or a doctor (public). NPIS: 0344 892 0111 (healthcare

number: professionals).

Further Information

All information in this safety data sheet refers to the unused product and its preparation.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Signal word: Warning



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 2 of 10

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

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

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.

P337+P313 If eye irritation persists: Get medical advice/attention.

Additional advice on labelling

none

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Pictograms:



2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aqueous solution.

Relevant ingredients

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (GB CLP	Regulation)	•		
122-99-6	2-phenoxyethanol				
	204-589-7	603-098-00-9			
	Acute Tox. 4, Eye Dam. 1, STOT SE 3; H302 H318 H335				
52-51-7	bronopol (INN); 2-bromo-2-nitropropane-1,3-diol				
	200-143-0	603-085-00-8			
	Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, Aquatic Acute 1; H312 H302 H315 H318 H335 H400				

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity	
	Specific Conc. I	Limits, M-factors and ATE		
122-99-6	204-589-7	2-phenoxyethanol	1 - < 5 %	
	dermal: LD50 =	LD50 = >2000 mg/kg; oral: ATE 1394 mg/kg		
52-51-7	200-143-0	bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	< 1 %	
	dermal: ATE =	1100 mg/kg; oral: ATE = 500 mg/kg		



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 3 of 10

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink 1 glass of of water.

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

No information available.

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

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

In case of fire, the smoke may contain, in addition to the base material, combustion products with not definable toxic and / or irritant compositions. Combustion products may i.a. contain: carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

The usual precautions are to be adhered to when handling chemicals.



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 4 of 10

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke. sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

For demonstration purposes, only.

The demo pack includes a bag containing 450 ml demonstration solution.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL

8.2. Exposure controls





Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

Not required if used as intended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Colour: blue

Odour: characteristic

Melting point/freezing point:

No data available



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 5 of 10

Boiling point or initial boiling point and

No data available

boiling range:

Flammability: No data available Lower explosion limits: No data available No data available Upper explosion limits: Flash point: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available No data available pH-Value: Viscosity / kinematic: No data available Water solubility: easily soluble

Solubility in other solvents

There are no data available on the mixture itself.

Partition coefficient n-octanol/water:

Vapour pressure:

Density:

Relative vapour density:

Particle characteristics:

No data available

No data available

No data available

No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

There are no data available on the mixture itself.

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

There are no data available on the mixture itself.

Other safety characteristics

Evaporation rate:

Solid content:

No data available

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no data available on the mixture itself.

10.2. Chemical stability

There are no data available on the mixture itself.

10.3. Possibility of hazardous reactions

There are no data available on the mixture itself.

10.4. Conditions to avoid

There are no data available on the mixture itself.

10.5. Incompatible materials

There are no data available on the mixture itself.

10.6. Hazardous decomposition products

There are no data available on the mixture itself.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 6 of 10

ATEmix calculated

ATE (oral) 139400 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name							
	Exposure route	Dose	Species	Source	Method			
122-99-6	2-phenoxyethanol	2-phenoxyethanol						
	oral	ATE 1394 mg/kg						
	dermal	LD50 >2000 mg/kg	Rabbit					
52-51-7	bronopol (INN); 2-bromo-2-nitropropane-1,3-diol							
	oral	ATE 500 mg/kg						
	dermal	ATE 1100 mg/kg						

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.

Skin corrosion/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

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

11.2. Information on other hazards

Endocrine disrupting properties

No data available

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
122-99-6	2-phenoxyethanol					
	Acute fish toxicity	LC50 220 - 460 mg/l	96 h	Leuciscus idus		
	Acute algae toxicity	ErC50 > 500 mg/l	72 h	Scenedesmus sp.		
	Acute crustacea toxicity	EC50 > 500 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability



according to UK REACH Regulation

Demo pack Formalin System

Art. no. 00.45.539 Revision date: 04.04.2024 Page 7 of 10

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
122-99-6	2-phenoxyethanol	1,16

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The product has not been tested.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land	traı	nsport	(ADR/F	RID)
			_	

No dangerous good in sense of this transport regulation. 14.1. UN number or ID number: 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. 14.4. Packing group:

Inland waterways transport (ADN)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es):

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

No dangerous good in sense of this transport regulation. 14.1. UN number or ID number:

No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name:

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 8 of 10

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

The mixture is not intended for bulk haulage.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Directive 2004/42/EC on VOC in 1 %

paints and varnishes:

Information according to Directive

Not subject to 2012/18/EU (SEVESO III)

2012/18/EU (SEVESO III):

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

This data sheet contains changes from the previous version in section(s): 7,9.



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 9 of 10

Abbreviations and acronyms

Acute Tox: Acute toxicity Skin Irrit: Skin irritation Eye Dam: Eye damage Eye Irrit: Eye irritation

STOT SE: Specific target organ toxicity - single exposure

Aquatic Acute: Acute aquatic hazard CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.



according to UK REACH Regulation

Demo pack Formalin System

Revision date: 04.04.2024 Art. no. 00.45.539 Page 10 of 10

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 receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)