

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 1 of 13

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

1.1. Product identifier

MorFFFix® (Formaline Substitute)

UFI: Q0Q6-Q1VJ-D00N-NKPH

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

Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	
Internet:	http://www.morphisto.de	

1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

methenamine

Signal word: Warning

Pictograms:



Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Avoid breathing Vapour.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 2 of 13

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

aqueous solution

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
67-68-5	Dimethyl sulfoxide			5 - < 10 %
	200-664-3		01-2119431362-50	
77-92-9	citric acid			1 - < 5 %
	201-069-1	607-750-00-3	01-2119457026-42	
	Eye Irrit. 2, STOT SE 3; H319 H335			
100-97-0	methenamine			1 - < 5 %
	202-905-8	612-101-00-2	01-2119474895-20	
	Flam. Sol. 2, Skin Sens. 1; H228 H317			

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. Limits, M-factors and ATE	
67-68-5	200-664-3	Dimethyl sulfoxide	5 - < 10 %
		dermal: LD50 = 40000 mg/kg; oral: LD50 = 28300 mg/kg	
77-92-9	201-069-1	citric acid	1 - < 5 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 5400 mg/kg	
100-97-0	202-905-8	methenamine	1 - < 5 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >20000 mg/kg	

Further Information

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove casualty to fresh air and keep warm and at rest. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 3 of 13

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth thoroughly with water. Call a physician immediately. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting.

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. The product itself does not burn.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. 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**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

For non-emergency personnel

Clear danger zone. Follow emergency plan. Consult an expert.

For emergency responders

Move undamaged containers from immediate hazard area if it can be done safely.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up**For containment**

Cover drains.

For cleaning up

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

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 4 of 13

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.) Provide adequate ventilation as well as local exhaustation at critical locations. Use extractor hood (laboratory). Do not breathe gas/fumes/vapour/spray. Always close containers tightly after the removal of product. Ensure cleanliness and dryness in the workplace.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

Further information on handling

Avoid contact with skin, eyes and clothes. When using do not eat, drink, smoke, sniff. Take off contaminated clothing and wash it before reuse. Street clothing should be stored separately from work clothing. Wash hands and face before breaks and after work and take a shower if necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Ensure adequate ventilation of the storage area.

Hints on joint storage

Do not store together with: food and feed. pharmaceuticals. Infectious substances. Radioactive substances. Explosive substances. Oxidizing substances. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Pyrophoric solids. Substances which in contact with water form flammable gases. Ammonium nitrate and preparations containing ammonium nitrate.

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place. Protect against: UV-radiation/sunlight.

Recommended storage temperature: 15-25 °C

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
67-68-5	Dimethyl sulfoxide			
Worker DNEL, long-term		inhalation	systemic	484 mg/m ³
Worker DNEL, long-term		inhalation	local	265 mg/m ³
Worker DNEL, long-term		dermal	systemic	200 mg/kg bw/day
100-97-0	methenamine			
Worker DNEL, long-term		inhalation	systemic	31 mg/m ³

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 5 of 13

PNEC values

CAS No	Substance	Value
Environmental compartment		
67-68-5	Dimethyl sulfoxide	
Freshwater		17 mg/l
Marine water		1,7 mg/l
Freshwater sediment		13,4 mg/kg
Micro-organisms in sewage treatment plants (STP)		11 mg/l
Soil		3,02 mg/kg
77-92-9	citric acid	
Freshwater		0,44 mg/l
Marine water		0,044 mg/l
Freshwater sediment		34,6 mg/kg
Marine sediment		3,46 mg/kg
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
Soil		33,1 mg/kg
100-97-0	methenamine	
Freshwater		3 mg/l
Marine water		0,5 mg/l
Freshwater sediment		2,4 mg/kg
Marine sediment		0,4 mg/kg
Secondary poisoning		53,33 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Use extractor hood (laboratory). Provide adequate ventilation as well as local exhaustion at critical locations. Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them. Avoid contact with skin, eyes and clothes.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Suitable eye protection: Tightly sealed safety glasses. EN 166

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.

Pull-over gloves of rubber. EN ISO 374

PVC (Polyvinyl chloride). (0,5 mm)

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 6 of 13

Butyl rubber. (0,5 mm)

Before using check leak tightness / impermeability.

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. Lab apron. Protective apron.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at:

generation/formation of aerosols

Generation/formation of mist

Insufficient ventilation.

Suitable respiratory protective equipment:

Combination filtering device (EN 14387) Type : A / P2/P3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Details on the requirements for use and maximum concentrations can be found in the "Rules for the use of respiratory protective devices" (BGR 190).

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless, clear	
Odour:	like:Soap.	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		3,5-4,5
Viscosity / kinematic:		not determined
Water solubility: (at 20 °C)		easily soluble
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		not determined
Vapour pressure: (at 20 °C)		23 hPa
Vapour pressure: (at 50 °C)		123 hPa
Density (at 20 °C):		1,04 g/cm ³
Relative vapour density:		not determined
Particle characteristics:		not applicable

9.2. Other information

Information with regard to physical hazard classes

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 7 of 13

Explosive properties

The product is not: Explosive.

Oxidizing properties

none

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Contact with acids: release of formaldehyde

10.4. Conditions to avoid

Keep away from heat. Protect from moisture.

10.5. Incompatible materials

hydrocarbons, halogenated. Nitric acid. Acetic anhydride. Strong acid. Peroxides. Oxidizing agents.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

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.

ATEmix calculated

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

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 8 of 13

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-68-5	Dimethyl sulfoxide				
	oral	LD50 mg/kg 28300	Rat.	suppliers SDS.	
	dermal	LD50 mg/kg 40000	Rat	suppliers SDS.	
77-92-9	citric acid				
	oral	LD50 mg/kg 5400	Mouse	ECHA	
	dermal	LD50 mg/kg >2000	Rat	ECHA	
100-97-0	methenamine				
	oral	LD50 mg/kg >20000	Rat	ECHA Dossier	
	dermal	LD50 mg/kg >2000	Rat.	ECHA Dossier	

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. (methenamine)

Carcinogenic/mutagenic/toxic effects for reproduction

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.

11.2. Information on other hazards
Endocrine disrupting properties

This product does not contain any substance that has endocrine disrupting properties in humans as no ingredient meets the criteria.

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information
12.1. Toxicity

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

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 9 of 13

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-68-5	Dimethyl sulfoxide					
	Acute fish toxicity	LC50 >25 mg/l	96 h	Pimephales promelas	suppliers SDS.	
	Acute algae toxicity	ErC50 17 mg/l	72 h	algae	suppliers SDS.	
	Acute crustacea toxicity	EC50 24,6 mg/l	48 h	Daphnia magna	suppliers SDS.	
	Acute bacteria toxicity	EC50 100 mg/l ()	0,5 h	activated sludge	suppliers SDS.	
77-92-9	citric acid					
	Acute fish toxicity	LC50 440 mg/l	96 h	Leuciscus idus (golden orfe)	ECHA	
	Acute crustacea toxicity	EC50 1535 mg/l	48 h	Daphnia magna (Big water flea)	ECHA	
100-97-0	methenamine					
	Acute fish toxicity	LC50 41000 mg/l	96 h	Lepomis macrochirus (Bluegill)	ECHA Dossier	
	Acute crustacea toxicity	EC50 92500 mg/l	48 h	Nitocra spinipes	ECHA Dossier	
	Acute bacteria toxicity	EC50 >5000 mg/l ()	0,5 h	Vibrio fisheri	ECHA Dossier	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
77-92-9	citric acid			
	Biodegradability	97 %	28	
	Readily biodegradable (according to OECD criteria).			
100-97-0	methenamine			
	Biodegradability	35 %	28	
	Not easily bio-degradable (according to OECD-criteria).			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-68-5	Dimethyl sulfoxide	-1,35
77-92-9	citric acid	-1,64
100-97-0	methenamine	-2,18

BCF

CAS No	Chemical name	BCF	Species	Source
67-68-5	Dimethyl sulfoxide	3,16		

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 10 of 13

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.

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. Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

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

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

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.

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.
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.

Marine transport (IMDG)

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.

Air transport (ICAO-TI/IATA-DGR)

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 11 of 13

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

14.6. Special precautions for user

Refer to section 6-8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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 40, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Additional information

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

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

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Dimethyl sulfoxide

citric acid

methenamine

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,11,12,13,14,15,16.

Rev. 1.0; 21.11.2011, Initial release

Rev. 1.01; 21.02.2012

Rev 1.1; 16.07.2014, Revision

Rev. 1.2; 02.08.2016, Changes in chapter: 13, 16.

Rev. 1,3; 30.04.2021; Überarbeitung Kap.: 1 - 16.

Rev. 2,0; 29.01.2024; general adjustment(s)

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 12 of 13

Abbreviations and acronyms

Flam. Sol: Flammable solids

Eye Irrit: Eye irritation

Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations

Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LC50: Lethal concentration, 50 percent

LD50: Lethal dosis, 50 percent

NOAEL: No observed effect Level

DNEL: Derived No Effect Level

PNEC: predicted no effect concentration

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)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

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>

EC/EEC: European Community/European Economic Community

Safety Data Sheet

according to UK REACH Regulation

MorFFFix® (Formaline Substitute)

Revision date: 29.01.2024

Product code: 13616.xxxxx

Page 13 of 13

EU: European Union

M-factor: Multiplying factor

IATA: International Air Transport Association

DGR: Dangerous Goods Regulations

ICAO: International Civil Aviation Organization

TI: Technical Instructions

VOC: volatile organic compound

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

Classification	Classification procedure
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H228	Flammable solid.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

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 above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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