

## **Safety Data Sheet**

according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 1 of 9

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

#### 1.1. Product identifier

Ammonium Sulfate Fixative pH 7,0

UFI: 22S4-F13F-M007-X9XG

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

#### Use of the substance/mixture

Use as laboratory reagent.

### Uses advised against

Any non-intended use.

# 1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH Street: Schumannstr. 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 Morphisto GmbH, Tel: +49(0)69 400 3019-60, Mo-Fr.: 09-16 Uhr

number:

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### **GB CLP Regulation**

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

### 2.2. Label elements

# Additional advice on labelling

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [CLP].

#### 2.3. Other hazards

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

# **Hazardous components**

none (according to UK REACH Regulation)

### **Further Information**

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate



# **Safety Data Sheet**

according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 2 of 9

List according to Article 59 of REACH.

#### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### **General information**

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 accident by inhalation: remove casualty to fresh air and keep at rest. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin irritation, seek medical treatment.

#### 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 out mouth, spit out liquid again. Let water be drunken in little sips (dilution effect). In all cases of doubt, or when symptoms persist, seek medical advice.

### 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. Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

### 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).

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### **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

Wear personal protection equipment. See protective measures under point 7 and 8.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

# 6.3. Methods and material for containment and cleaning up

# For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the



# **Safety Data Sheet**

according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 3 of 9

recovered material as prescribed in the section on waste disposal.

#### Other information

Clean contaminated objects and areas thoroughly observing environmental regulations.

### 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

Wear personal protection equipment.

Avoid contact with skin, eyes and clothes.

### Advice on protection against fire and explosion

The product is not: Combustible.

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. Draw up and observe skin protection programme. Always close containers tightly after the removal of product.

### 7.2. Conditions for safe storage, including any incompatibilities

# Requirements for storage rooms and vessels

Keep container tightly closed.

### Hints on joint storage

Do not store together with: Explosive substances. Infectious substances. Radioactive substances. Food and fodder

### Further information on storage conditions

Protect from direct sunlight.

Recommended storage temperature: 4-8 °C

### 7.3. Specific end use(s)

Use as laboratory reagent.

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

## 8.2. Exposure controls

## Appropriate engineering controls

Wear personal protection equipment.

Use extractor hood (laboratory).

# Individual protection measures, such as personal protective equipment

### Eye/face protection

Wear eye/face 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



## **Safety Data Sheet**

according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 4 of 9

supplier of these gloves. Pull-over gloves of rubber. EN ISO 374

Suitable material:

(penetration time (maximum wearing period): >= 8 h):

Butyl rubber. (0,5 mm)

Protective clothing should be selected, depending on concentration and quantity of the hazardous substance.

The chemical resistance of the products should be discussed with suppliers.

#### Skin protection

Use of protective clothing. Protective clothing.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

### **Environmental exposure controls**

No special measures are necessary.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: not determined

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range:

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): 6,9-7,1 Viscosity / kinematic: not determined Water solubility: easily soluble

(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 23 hPa

(at 20 °C)

Density (at 20 °C): 1,18 g/cm³
Relative vapour density: not determined
Particle characteristics: not applicable

## 9.2. Other information

# Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate: not determined Solid content: not determined

# **SECTION 10: Stability and reactivity**



## **Safety Data Sheet**

according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 5 of 9

### 10.1. Reactivity

Stable under normal storage and handling conditions.

#### 10.2. Chemical stability

Stable under normal storage and handling conditions.

## 10.3. Possibility of hazardous reactions

No information available.

### 10.4. Conditions to avoid

No information available.

### 10.5. Incompatible materials

Oxidizing agents, strong. Reducing agents, strong.

### 10.6. Hazardous decomposition products

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

### **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

### Irritation and corrosivity

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

### Sensitising effects

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

### Carcinogenic/mutagenic/toxic effects for reproduction

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

### STOT-single exposure

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 a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Other information

The mixture is classified as not 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.

# 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.



# **Safety Data Sheet**

according to UK REACH Regulation

## Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 6 of 9

### 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.

### 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. Contents / container can be disposed of in accordance with national regulations.

### List of Wastes Code - residues/unused products

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16

05 08

### List of Wastes Code - used product

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16  $\,$ 

05 08

#### List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately

collected municipal packaging waste); mixed packaging

#### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Non-contaminated packages may be recycled.

# **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.



# **Safety Data Sheet**

according to UK REACH Regulation

Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 7 of 9

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

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

No information available.

### **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 75

Information according to 2012/18/EU

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

(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):

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16. Rev.: 1,0; Initial release: 19.02.2012

Rev. 2,0; 17.11.2023; general adjustment(s), Change of classification/labeling



## **Safety Data Sheet**

### according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 8 of 9

### Abbreviations and acronyms

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

OSHA: Occupational Safety and Health Administration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level LOAEL: Lowest observed adverse effect level NOAEC: No observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

DNEL: Derived No Effect Level

PNEC: predicted no effect concentration TSCA: Toxic Substances Control Act

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

NTP: National Toxicology Program

SARA: Superfund Amendments and Reauthorization Act

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

PBT: Persistent bioaccumulative toxic SVHC: substance of very high concern 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 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 MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

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

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



# **Safety Data Sheet**

according to UK REACH Regulation

# Ammonium Sulfate Fixative pH 7,0

Revision date: 17.11.2023 Product code: 12918.xxxxx Page 9 of 9

MFAG: Medical First Aid Guide VOC: Volatile Organic Compounds

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

#### **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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)