

# **Safety Data Sheet**

according to UK REACH Regulation

# EDTA Decalcifying Solution ~ 20 %

Revision date: 11.10.2023 Product code: 13214.xxxxx Page 1 of 10

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

## 1.1. Product identifier

EDTA Decalcifying Solution ~ 20 %

UFI: PGK5-81DY-800Q-RCEK

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

number:

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## **GB CLP Regulation**

STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

# **GB CLP Regulation**

# Hazard components for labelling

Disodium dihydrogen ethylenediaminetetraacetate

Signal word: Warning

Pictograms:



### **Hazard statements**

H373 May cause damage to organs through prolonged or repeated exposure.

# **Precautionary statements**

P314 Get medical advice/attention if you feel unwell.

P260 Do not breathe mist/vapours/spray.

## Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning



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#### Pictograms:



# 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

#### **Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate			15 - < 20 %
	205-358-3		01-2119486775-20	
	Acute Tox. 4, STOT RE 2; H332 H373			

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			
6381-92-6	205-358-3	Disodium dihydrogen ethylenediaminetetraacetate	15 - < 20 %	
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 2800 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

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. No special measures are necessary. In all cases of doubt, or when symptoms persist, seek medical advice.

## After contact with skin

Immediately remove any contaminated clothing, shoes or stockings. Wash with plenty of water. In case of skin irritation, seek medical treatment.

## After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.



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#### After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. 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. The product itself does not burn.

### Unsuitable extinguishing media

none

# 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.

#### **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. Conditions to avoid: Generation/formation of aerosols

## 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 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.

#### Other information

Clear contaminated areas thoroughly.

## 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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Use extractor hood (laboratory).

Wear suitable protective clothing. (See section 8.)



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## Advice on protection against fire and explosion

No special fire protection measures are necessary.

## 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

Conditions to avoid: Generation/formation of aerosols

# 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Recommended storage temperature: 15-25 °C

#### Hints on joint storage

Do not store together with: Oxidizing substances.

## Further information on storage conditions

Keep/Store only in original container. Protect against: frost. heat. Cold. Humidity

## 7.3. Specific end use(s)

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

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

#### 8.1. Control parameters

#### **DNEL/DMEL values**

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate					
Worker DNEL, long-term		inhalation	local	1,5 mg/m³		
Worker DNEL, acute		inhalation	local	3 mg/m³		

## **PNEC** values

CAS No	Substance		
Environmental	Environmental compartment		
6381-92-6 Disodium dihydrogen ethylenediaminetetraacetate			
Freshwater		2,2 mg/l	
Marine water		0,22 mg/l	
Micro-organisms in sewage treatment plants (STP)		43 mg/l	
Soil		0.72 mg/l	

# Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2. Exposure controls



# Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Use extractor hood (laboratory).



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#### 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

Suitable material:

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

CR (polychloroprenes, Chloroprene rubber). (0,5 mm)

NBR (Nitrile rubber). (0,35 mm)

FKM (fluororubber). (0,4 mm)

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

Butyl rubber. (0,5 mm)

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

## Respiratory protection

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

generation/formation of aerosols

Generation/formation of mist

Suitable respiratory protective equipment:

particulates filter device (DIN EN 143). Type: P2/P3

#### **Environmental exposure controls**

Do not empty into drains.

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

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: characteristic

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): 7,2-7,4 Viscosity / kinematic: not determined Water solubility: completely miscible

(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density (at 20 °C):

not determined

not determined

1,09 g/cm³



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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

Sustaining combustion: Not sustaining combustion

Oxidizing properties

The product is not: oxidising

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

Stable under normal storage and handling conditions.

# 10.3. Possibility of hazardous reactions

Reacts with:

#### 10.4. Conditions to avoid

Keep away from heat. Protect against: frost.

#### 10.5. Incompatible materials

Materials to avoid:

## 10.6. Hazardous decomposition products

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

# **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) 69,62 mg/l; ATE (inhalation dust/mist) 9,494 mg/l

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
6381-92-6	Disodium dihydrogen et	Disodium dihydrogen ethylenediaminetetraacetate					
	oral	LD50 mg/kg	2800	Rat	Lieferanten SDB		
	inhalation vapour	ATE	11 mg/l				
	inhalation dust/mist	ATE	1,5 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.



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## STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Disodium dihydrogen ethylenediaminetetraacetate)

## **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 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.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate						
	Acute fish toxicity	LC50 mg/l	>100	96 h	Ocorhynchus mykiss	ECHA (139-33-3)	
	Acute crustacea toxicity	EC50	140 mg/l	48 h	Daphnia magna	ECHA (139-33-3)	
	Fish toxicity	NOEC	>35 mg/l	35 d	Danio rero	ECHA	
					Danio rerio		
	Crustacea toxicity	NOEC	25 mg/l	21 d	Daphnia magna	ECHA	

## 12.2. Persistence and degradability

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
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate	1,8

# 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.

## 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**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods



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## **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.

### 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

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself. 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.

## Other applicable information (marine transport)

Not restricted

# 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.

# Other applicable information (air transport)

Not restricted

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

## 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



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No dangerous good in sense of this transport regulation.

# **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

Information according to 2012/18/EU

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

(SEVESO III):

**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): 2 - obviously hazardous to water

#### 15.2. Chemical safety assessment

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

Disodium dihydrogen ethylenediaminetetraacetate

## **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.

24.05.2012 Rev.1.0 Initial release

Rev. 2,0; 11.10.2023; general adjustment(s), Change of classification/labeling

# Abbreviations and acronyms

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



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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 SVHC: Substance of Very High Concern

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
STOT RE 2; H373	Calculation method

#### Relevant H and EUH statements (number and full text)

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

#### **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.)