

according to Regulation (EC) No 1907/2006

# N,N-diethyl-1,4-phenylenediammonium sulphate (DPD sulphate) for analysis

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

### 1.1. Product identifier

N,N-diethyl-1,4-phenylenediammonium sulphate (DPD sulphate) for analysis

Substance name: N,N-diethylbenzene-1,4-diammonium sulphate

CAS No: 6283-63-2 EC No: 228-500-6

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

### Uses advised against

Do not use for private purposes (household).

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

Company name: AnalytiChem GmbH Street: Stempelstraße 6 Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

e-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

e-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

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

## 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Acute Tox. 4; H312 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

### Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



### **Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin.

H315 Causes skin irritation.



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H319 Causes serious eye irritation. H335 May cause respiratory irritation.

### **Precautionary statements**

P280 Wear protective gloves and eye/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

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.

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Sum formula: C10 H16 N2 . H2 S O4

Molecular weight: 262 g/mol

### **Hazardous components**

CAS No	Chemical name		Quantity	
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
6283-63-2	N,N-diethylbenzene-1,4-diammonium sulphate		100 %	
	228-500-6			
	Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H312 H302 H315 H319 H335			

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

### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	
	Specific Conc. Limits, M-factors and ATE		
6283-63-2	228-500-6	N,N-diethylbenzene-1,4-diammonium sulphate	100 %
	dermal: ATE = 1100 mg/kg; oral: ATE = 500 mg/kg		

#### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

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

### 4.1. Description of first aid measures

### **General information**

Take off immediately all contaminated clothing.

#### After inhalation

Provide fresh air.

Call a physician immediately.

## After contact with skin

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

### After contact with eyes

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

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

## After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.



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

No data available

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

No data available

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

### Suitable extinguishing media

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

## Unsuitable extinguishing media

no restriction

### 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may be liberated:

Carbon dioxide (CO2), Carbon monoxide

Nitrogen oxides (NOx)

Sulphur oxides

#### 5.3. Advice for firefighters

Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

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.

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

Use water spray jet to protect personnel and to cool endangered containers.

## **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

### For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

**Emergency procedures** 

Do not breathe dust/fume/gas/mist/vapours/spray.

## For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 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 containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Take up carefully when dry. Take up dust-free and set down dust-free.

#### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

### Other information

Provide adequate ventilation.



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Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

## 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

Read label before use. Handle and open container with care.

Avoid dust formation. Do not breathe dust.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

## Advice on protection against fire and explosion

Usual measures for fire prevention.

### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Make available sufficient washing facilities

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 or drink

## Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

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

## Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed.

## Further information on storage conditions

Store in a dry place.

Protect against:

Light

Humidity

## 7.3. Specific end use(s)

Laboratory chemicals

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

## 8.1. Control parameters

## 8.2. Exposure controls

## Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Avoid dust formation. Do not breathe dust.

### Individual protection measures, such as personal protective equipment

## Eye/face protection

goggles



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Wear eye/face protection.

### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L Suitable material: NBR (Nitrile rubber) 0,11mm Wearing time with permanent contact: >480min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L Suitable material: NBR (Nitrile rubber) 0,11mm

Wearing time with occasional contact (splashes): >480min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

### Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

## Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

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

# 9.1. Information on basic physical and chemical properties

Physical state: solid
Colour: beige
Odour: odourless
Odour threshold: No data available

Melting point/freezing point:

184-187 °C

Boiling point or initial boiling point and

No data available

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available Flash point: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available 2.0-2.2 pH-Value: No data available Viscosity / kinematic: Water solubility: No data available

Solubility in other solvents

No data available

Partition coefficient n-octanol/water: No data available



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Vapour pressure:No data availableVapour pressure:No data availableDensity:No data availableBulk density:No data availableRelative vapour density:No data available

### 9.2. Other information

# Information with regard to physical hazard classes

Explosive properties

No data available

Sustaining combustion: No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

No data available

## Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

100,00 %
Sublimation point:

No data available
Softening point:

No data available
Pour point:

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information
No data available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No data available

# 10.2. Chemical stability

Protect against:

Light

Humidity

# 10.3. Possibility of hazardous reactions

Oxidising agent, strong

## 10.4. Conditions to avoid

Light

Humidity

# 10.5. Incompatible materials

No data available

## 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

# **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008



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### Toxicocinetics, metabolism and distribution

No data available

### **Acute toxicity**

Harmful if swallowed.

Harmful in contact with skin.

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
6283-63-2	N,N-diethylbenzene-1,4-diammonium sulphate					
	oral	ATE mg/kg	500			
	dermal	ATE mg/kg	1100			

### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

### 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

May cause respiratory irritation. (N,N-diethylbenzene-1,4-diammonium sulphate)

## 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.

## Specific effects in experiment on an animal

No data available

### Additional information on tests

No data available

### **Practical experience**

No data available

## 11.2. Information on other hazards

### Other information

No data available

## **Further information**

No data available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

No data available

## 12.2. Persistence and degradability

No data available

# 12.3. Bioaccumulative potential

log Pow 2,24

## 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment



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This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

### 12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

#### 12.7. Other adverse effects

No data available

#### **Further information**

Do not allow to enter into surface water or drains.

Discharge into the environment must be avoided.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not allow to enter into surface water or drains.

## Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

Land transport	(ADR/RID)
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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)

ir 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 dangerous good in sense of this transport regulation.

### 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

### **SECTION 15: Regulatory information**



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## 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

## National regulatory information

Water hazard class (D): 3 - highly hazardous to water

### **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,7,8,9,10,11,12,13,14,15.

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

H302 Harmful if swallowed.

H302+H312 Harmful if swallowed or in contact with skin.

H312 Harmful in contact with skin.
H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

#### **Further Information**

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 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.