

Chemische Fabrik Wülfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>	State: 12/18/2018 Author: U. Köhler/Spl
	<b>Kjeldahl tablets W11 Antifoam</b>	Version: 2.0 Page 1 of 7

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

### 1.1. Product identifier

1.1.1. Trade name: **Kjeldahl tablets W11 Antifoam**

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

#### 1.2.1. Relevant identified uses

Use descriptor category:

Life cycle stage (LCS) PW: Widespread use by professional workers

Sector of use SU24: Research and development (analytical chemistry)

Technical function: fine chemical

#### 1.2.2. Uses advised against

not known

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

Chemische Fabrik Wülfel GmbH & Co. KG

Hildesheimer Straße 305, 30519 Hannover, Germany

phone number: 0049 511 98496-0,

fax number: 0049 511 98406-40

e-mail address of the person responsible for

Safety Data Sheet: [cfw@wuelfel.de](mailto:cfw@wuelfel.de)

Web: [www.wuelfel.de](http://www.wuelfel.de)

### 1.4. Emergency telephone number

00 49 511 98496-0 (Office hours:

Monday - Thursday 8 o'clock a.m. to 4 o'clock p.m.)

or

Poison control centre north (Bremen, Hamburg, Lower Saxony, Schleswig-Holstein)

Tel.: 00 49 551-19 24 0 (24h emergency call)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### 2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP Regulation)

The mixture is not hazardous according of that Regulation.

### 2.2. Label elements

None

### 2.3. Other hazards

The mixture does not meet the criteria for classification as PBT or vPvB substance.

See also the sections 5, 6, 10, 11, 12, 15.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

The product is not a pure substance.

### 3.2. Mixtures

A mixture of sodium sulfate and a small quantity of Silicone Antifoam.

Chemical name	CAS No	EC No	REACH Registration No	% w/w	Classification according to Regulation (EC) No 1272/2008
sodium sulfate, water-free	7757-82-6	231-820-9	01-2119519226-43	97.0	not classified as hazardous
Silicone Antifoam	-	-		3.0	not classified as hazardous

Chemische Fabrik Wülfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>  <b>Kjeldahl tablets W11 Antifoam</b>	State: 12/18/2018 Author: U. Köhler/Spl  Version: 2.0 Page: 2 of 7
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### 3.3. Additional information

None

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### 4.1.1. General informations

Consult doctor in case of pathological signs.

##### 4.1.2. In case of eye contact

Rinse widely opened eye for several minutes (at least 10 min) under running water. Remove contact lenses. Continue rinse. Consult an ophthalmologist in case of complaints.

##### 4.1.3. In case of skin contact

Remove contaminated clothing immediately and wash affected areas with soap and water.

##### 4.1.4. Following ingestion

Rinse mouth with water and call a doctor! Do not induce vomiting! Encourage to drink water in small sips (dilution effect).

##### 4.1.5. Following inhalation

If inhaling abrasive dust remove victim to fresh air.

##### 4.1.6. Self-protection of the First Aider

Avoid contact with substance still present.

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

None

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

None

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media:

water spray, foam, carbon dioxide or extinguishing powder

##### Unsuitable extinguishing media:

not known

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

Non-combustible. In a fire corrosive sulfur oxides can be released.

#### 5.3. Advice for firefighters

Product is non-combustible, fire-extinguishing measures are to be adapted to surrounding.

**The extinguishing water should not enter the sewage system!**

### SECTION 6: Accidental release measures

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

Avoid formation of dust. Do not eat or drink when handling Kjeldahl tablets. Always wear gloves, goggles and protective clothing.

#### 6.2. Environmental precautions

Product should not be discharged into drains or waterways.

#### 6.3. Methods and material for containment and cleaning up

Take up mechanically. In the post-cleaning avoid formation of dust. The spilled product should be discarded.

#### 6.4. Reference to other sections

See sections 4, 7, 8 and 13.

Chemische Fabrik Wüfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>	State: 12/18/2018 Author: U. Köhler/Spl
	<b>Kjeldahl tablets W11 Antifoam</b>	Version: 2.0 Page 3 of 7

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Do not eat or drink when handling Kjeldahl tablets. Use protective gloves, goggles and protective clothing.

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

Kjeldahl tablets should be stored dry in tightly closed containers, separate from foodstuffs, beverages and animal feedstocks.

The product is hygroscopic.

Storage class: 13 (non-combustible solids) according to TRGS 510 (Storage of hazardous substances in nonstationary containers), Annex 4.

### 7.3. Specific end use(s)

Anti-foaming agent, excipient for determination of nitrogen by the Kjeldahl method.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

The product does not contain substances with specific occupational exposure limit (OEL) values.

#### Sodium sulfate:

General limit for dust (TRGS 900, Germany):

Inhalable fraction (I dust): 10 mg/m<sup>3</sup> (TWA)

Respirable fraction (R dust): 1.25 mg/m<sup>3</sup> (TWA)

<b>DNEL (systemic)</b>			
All figures are taken from REACH registration dossier for sodium sulfate.			
Route	Substance	Worker	General population
Inhalation (Long time exposure)	sodium sulfate	20 mg/m <sup>3</sup>	12 mg/m <sup>3</sup>
Dermal (Long time exposure)	sodium sulfate	no hazard identified	
Oral (Long time exposure)	sodium sulfate	no hazard identified	

### **PNEC**

All figures are taken from REACH registration dossier for sodium sulfate.

Substance	sodium sulfate
Freshwater	11.09 mg/l
Seawater	1.109 mg/l
Sediment (Freshwater)	40.2 mg/ kg Sediment dw
Sediment (Seawater)	4.02 mg/ kg Sediment dw
Soil	1.54 mg/ kg Boden dw

### 8.2. Exposure controls

#### 8.2.1. Personal protective equipment

##### 8.2.1.1 Eye / Face protection

Safety glasses required.

##### 8.2.1.2. Respiratory protection

Required when occurrence of dusts (particle filter P1 according to DIN 3181).

##### 8.2.1.3. Skin protection

Chemical protective gloves, e.g. consisting of nitrile rubber (check for damage before use), penetration time (thickness: 0.11 mm, value for permeation: > 480 min, EN 374)

This recommendation applies only to the product stated in the safety data sheet supplied and specified by CFW. If the user plans a different use, the relevant literature is to be consulted on protective gloves.

Chemische Fabrik Wülfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>	State: 12/18/2018 Author: U. Köhler/Spl
	<b>Kjeldahl tablets W11 Antifoam</b>	Version: 2.0 Page 4 of 7

### 8.2.2. General health and safety measures

Avoid unnecessary contact with the product.  
Wash hands after work, change contaminated clothing.  
While using do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

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

Appearance:	white tablets
Weight:	1.0 g
Odour:	odourless
Odour threshold:	not applicable
pH value (20 °C):	5.33 (50 g/l H <sub>2</sub> O), residue of antifoamers
Melting point:	not determined
Freezing point:	not determined
Initial boiling point and boiling range:	not applicable, since solid
Flash point:	not determined
Evaporation rate:	not determined
Flammability:	not determined
Upper/lower flammability or explosive limits:	see the comments on flammability
Vapour pressure:	not determined
Vapour density:	not determined
Density (20 °C):	2,65 g/cm <sup>3</sup>
Bulk Density (20 °C):	1420 kg/m <sup>3</sup>
Solubilities	
Solubility in water (20 °C):	170 g/l (residue of antifoamers)
Partition coefficient: n-octanol/water (log K <sub>OW</sub> ):	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
Viscosity:	not applicable, since solid
Explosive properties:	not applicable, since stable inorganic solid (insensitive to heat, impact or friction, contains no chemically unstable or high energetic groups)
Oxidising properties:	not applicable, all components contain no oxidizing acting molecule groups

### 9.2. Other information

Other physical and chemical properties have not been determined.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

See subsection 10.3.

### 10.2. Chemical stability

The product is stable under normal ambient conditions.

### 10.3. Possibility of hazardous reactions

Reaction with aluminium at high temperatures.

### 10.4. Conditions to avoid

Strong heating (sodium sulfate: Decomposition temperature: ≥ 890 ° C)

### 10.5. Incompatible materials

Unknown

Chemische Fabrik Wüfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>	State: 12/18/2018 Author: U. Köhler/Spl
	<b>Kjeldahl tablets W11 Antifoam</b>	Version: 2.0 Page 5 of 7

## 10.6. Hazardous decomposition products

Sulfur oxides

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### 11.1.1. Acute toxicity

All figures are taken from REACH registration dossiers for sodium sulfate.

##### Acute oral toxicity

*Sodium sulfate*: LD<sub>50</sub> (rat) > 2000 mg/kg bw (OECD Test guideline 423)

##### Acute inhalation toxicity

*Sodium sulfate*: LC<sub>50</sub>: (rat) > 2.4 mg/l/4h (OECD Test guideline 436)

##### 11.1.2. Skin corrosion/irritation

The product is not classified as a skin irritant or as corrosive to the skin.

##### 11.1.3. Eye damage/irritation

The product is not classified as eye irritant or as eye damaging.

##### 11.1.4. Sensitisation to the respiratory tract and the skin

Not known

##### 11.1.5. Germ cell mutagenicity

Not known

##### 11.1.6. Carcinogenicity

Not known

##### 11.1.7. Reproductive toxicity

Not known

##### 11.1.8. Specific target organ toxicity (single exposure)

Not known

##### 11.1.9. Specific target organ toxicity (repeated exposure)

Not known

##### 11.1.10. Aspiration hazard

Not known

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Acute aquatic toxicity:

All figures are taken from REACH registration dossier for sodium sulfate.

##### Toxicity to fish

##### *Sodium sulfate*

LC<sub>50</sub> (*Pimephales promelas*, 96 h): 7960 mg/l (Test guideline EPA/600/4-90/027)

##### Toxicity to daphnia

##### *Sodium sulfate*

EC<sub>50</sub> (*Daphnia magna*, 48 h): 4580 mg/l (Test guideline EPA/600/4-90/027)

#### 12.2. Persistence and degradability

In soil, silicone (chemically exact name: siloxanes) are degraded into inorganic hydrated silica and carbon dioxide. Siloxanes are removed from water by sedimentation or binding to sewage sludge.

#### 12.3. Bioaccumulative potential

No bioaccumulation potential.

#### 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

The silicone used is not identified as a PBT or vPvB substance.

Chemische Fabrik Wülfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>	State: 12/18/2018 Author: U. Köhler/Spl
	<b>Kjeldahl tablets W11 Antifoam</b>	Version: 2.0 Page 6 of 7

#### 12.6. Other adverse effects

Not known

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

Product residues and the packaging must be disposed in accordance with the Waste Directive 2008/98/EC and national and regional regulations.

The revised list of waste pursuant to article 7 of the Directive was published with the Commission's Decision 2014/955/EU.

##### Product

##### **Waste key:**

06 03 14 (solid salts and solutions not containing cyanides or heavy metals)

##### Packaging

Contaminated packaging should be disposed of like the product.

#### SECTION 14: Transport information

Not hazardous good according to the national and international dangerous goods regulations.

#### SECTION 15: Regulatory information

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

##### 15.1.1. EU regulations

##### Safety Data Sheet:

Regulation (EC) No 1907/2006 (REACH), Annex II (SDS) amended by Regulation (EU) 2015/830.

##### Classification and labelling:

Regulation (EC) No 1272/2008 (CLP (EU-GHS) Regulation)

##### 15.1.2. Basic national regulations (Germany)

Act for the protection of young people at work (JArbSchG)

Observe employment restrictions according to § 22 for teens.

Act for the protection of mothers at work, in education and in study (MuSchG)

Inadmissible activities and working conditions according to §§ 11 and 12 MuSchG for expectant and nursing mothers.

Act on protection against hazardous substances (Chemicals Act (ChemG))

Regulation on protection against hazardous substances (Hazardous Substances Regulation (GefStoffV))

Regulation on bans and restrictions on the marketing and delivery of certain substances, mixtures and products pursuant to the Chemicals Act (ChemVerbotsV)

Ordinance on facilities for handling substances that are hazardous to water (AwSV) of 18 April 2017.

Sodium sulfate (identification number: 286, see database Rigoletto) - Water hazard class (WGK): 1 (slightly hazardous to water)

Water hazard class (WGK) of Kjeldahl tablets W11 Antifoam: 1 (slightly hazardous to water)

(Derivation: mass fraction of sodium sulfate  $\geq$  3%, see AwSV, Annex 1, section 5.2.3 Derivation of water hazard class 1)

##### 15.2. Chemical Safety Assessment

For this product a chemical safety assessment was not created.

Chemische Fabrik Wülfel	<b>Safety Data Sheet in accordance with Regulation (EC) No 1907/2006</b>	State: 12/18/2018 Author: U. Köhler/Spl
	<b>Kjeldahl tablets W11 Antifoam</b>	Version: 2.0 Page 7 of 7

## SECTION 16: Other information

### 16.1. Indication of changes

- Subsection 8.1. - Update
- Subsection 9.1. - Update
- Subsection 11.1.1. - Update
- Subsection 12.1. - Update
- Subsection 16.2. - Update

### 16.2. Literature and sources

#### Directives and Regulations

REACH Regulation (EC) No 1907/2006 as last amended by Regulation (EU) 2018/2005.

CLP (EU-GHS) Regulation (EC) No 1272/2008, as last amended by Regulation (EU) 2018/1480.

#### REACH registration dossier

Sodium sulfate (REACH Registration No 01-2119519226-43)

### 16.3. Abbreviations and acronyms

bw	body weight
CAS	Chemical Abstracts Service
CLP	Classification, Labelling, Packaging
DIN	German Institute for Standardization Incorporated Society - Deutsches Institut für Normung e. V.
DNEL	Derived No Effect Level
dw	dry weight
EC	European Community
EC	Effective Concentration
EC <sub>r</sub>	Effective Concentration (Growth rate)
ECHA	European Chemicals Agency
EN	European Standards
EPA	Environmental Protection Agency
EU	European Union
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
LC	Lethal Concentration
LD	Lethal Dose
OECD	Organisation for Economic Co-operation and Development (Organisation de coopération et de développement économiques, OCDE)
PBT	Persistent, Bioaccumulative, Toxic
PNEC	Predicted No Effect Concentration
REACH	Regulation, Evaluation and Authorization of Chemicals
TRGS	Technical Rules for Hazardous Substances
TWA	Time-Weighted Average
vPvB	very persistent and very bioaccumulative

### 16.4. Further information

This information is based on our present knowledge, they do not constitute an assurance of product properties and establishes no contract legal rights.