

**Safety Data Sheet**

according to UK REACH Regulation

**DEKASYL MS 1 BLACK**

Revision date: 24.01.2021

Product code: 1823

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

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

Adhesives, sealants

**Uses advised against**

No further relevant information available.

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

Company name: DINOL GmbH

Street: Pyrmonter Strasse 76

Place: D-32676 Luegde

Telephone: + 49 (0) 5281 982980

Telefax: + 49 (0) 5281 9829860

e-mail: msds@dinol.com

Contact person: Labor

Responsible Department: msds@dinol.com

**1.4. Emergency telephone number:**

Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)

**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****GB CLP Regulation****Special labelling of certain mixtures**

EUH208 Contains N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane, N-(3(dimethoxymethylsilyl)propyl)ethylenediamine, Dioctyltin acetylacetonate. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

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### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
2768-02-7	Vinyltrimethoxysilane			3 - < 5 %
	220-449-8		01-2119513215-52	
	Flam. Liq. 3, Acute Tox. 4, STOT RE 2; H226 H332 H373			
1760-24-3	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane			< 1 %
	217-164-6		01-2119970215-39	
	Acute Tox. 2, Eye Dam. 1, Skin Sens. 1; H330 H318 H317			
3069-29-2	N-(3(dimethoxymethylsilyl)propyl)ethylenediamine			< 1 %
	221-336-6		01-2119963926-21	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1; H302 H315 H318 H317			
54068-28-9	Diocetyl tin acetylacetonate			< 1 %
	483-270-6		01-0000020199-67	
	Skin Sens. 1, STOT SE 2; H317 H371			

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	
2768-02-7	220-449-8	Vinyltrimethoxysilane	3 - < 5 %
		inhalation: LC50 = 16,8 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 3200 mg/kg; oral: LD50 = 7120-7236 mg/kg	
1760-24-3	217-164-6	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	< 1 %
		inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = 2995 mg/kg	
3069-29-2	221-336-6	N-(3(dimethoxymethylsilyl)propyl)ethylenediamine	< 1 %
		oral: ATE = 500 mg/kg	
54068-28-9	483-270-6	Diocetyl tin acetylacetonate	< 1 %
		Skin Sens. 1; H317: >= 5 - 100	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

No special measures are necessary.

#### After inhalation

Provide fresh air. Call a doctor if you feel unwell.

#### After contact with skin

No special measures are necessary.

#### 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.

#### After ingestion

IF SWALLOWED: Call a POISON CENTER/doctor// if you feel unwell.

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

No further relevant information available.

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

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No further relevant information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

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

**Unsuitable extinguishing media**

Extinguishing powder

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

No further relevant information available.

**5.3. Advice for firefighters**

Use suitable breathing apparatus.

**Additional information**

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

Provide adequate ventilation.

**For emergency responders**

For further specification, refer to section 8 of the SDS.

**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**

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

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

Treat the recovered material as prescribed in the section on waste disposal.

**Other information**

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

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Use only in well-ventilated areas.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from food, drink and animal feedingstuffs. 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.

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

#### Requirements for storage rooms and vessels

No special measures are necessary.

#### Hints on joint storage

Not required.

#### Further information on storage conditions

none

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
2768-02-7	Vinyltrimethoxysilane			
Consumer DNEL, long-term		dermal	systemic	0,3 mg/kg bw/day
Consumer DNEL, acute		dermal	local	26,9 mg/person/day
Consumer DNEL, long-term		oral	systemic	0,3 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	4,9 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0,69 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,04 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	93,4 mg/m <sup>3</sup>
1760-24-3	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane			
Worker DNEL, long-term		dermal	systemic	5,0 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	5,0 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	8,7 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	17,0 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	35,3 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	35,3 mg/m <sup>3</sup>

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### PNEC values

CAS No	Substance	
Environmental compartment		Value
2768-02-7	Vinyltrimethoxysilane	
Freshwater		0,34 mg/l
Marine water		0,034 mg/l
Freshwater sediment		1,24 mg/kg
Marine sediment		0,12 mg/kg
Micro-organisms in sewage treatment plants (STP)		110 mg/l
Soil		0,052 mg/kg
1760-24-3	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	
Freshwater		0,062 mg/l
Marine water		0,0062 mg/l
Freshwater sediment		0,22 mg/kg
Marine sediment		0,022 mg/kg
Micro-organisms in sewage treatment plants (STP)		25,0 mg/l
Soil		0,0085 mg/kg

### 8.2. Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

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

##### Eye/face protection

Filling and transfer : Eye glasses with side protection (DIN EN 166)

##### Hand protection

FKM (fluoro rubber), Breakthrough time (maximum wearing time): 480 min.

NBR (Nitrile rubber), Breakthrough time (maximum wearing time): 480 min.

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.

Protective gloves have to be replaced at the first sign of deterioration.

Protect skin by using skin protective cream.

##### Skin protection

Wear anti-static footwear and clothing

##### Respiratory protection

Work in well-ventilated zones or use proper respiratory protection.

In case of insufficient ventilation, wear suitable respiratory equipment. gas filtering equipment (EN 141), Filter material/medium: A

## SECTION 9: Physical and chemical properties

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

Physical state:	Paste
Colour:	black, white, grey
Odour:	characteristic

#### Test method

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### Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	> 34 °C
Softening point:	not determined
Flash point:	> 100 °C

### Flammability

Solid/liquid:	not determined
Gas:	not determined

### Explosive properties

not determined

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	370 °C
Decomposition temperature:	not applicable

### Oxidizing properties

not determined

pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	not applicable

### Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	1,58 g/cm <sup>3</sup> DIN 51757
Relative vapour density:	not determined
Particle characteristics:	not applicable

## 9.2. Other information

### Other safety characteristics

No information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No further relevant information available.

### 10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

No further relevant information available.

### 10.5. Incompatible materials

No further relevant information available.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

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### 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 tested

LC50, inhalation (vapour) (4 h)      Dose      Species      Source  
30,1 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2768-02-7	Vinyltrimethoxysilane				
	oral	LD50 7120-7236 mg/kg	Rat		
	dermal	LD50 3200 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 16,8 mg/l	Rat		
	inhalation aerosol	ATE 1,5 mg/l			
1760-24-3	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane				
	oral	LD50 2995 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
	inhalation vapour	ATE 0,5 mg/l			
	inhalation aerosol	ATE 0,05 mg/l			
3069-29-2	N-(3(dimethoxymethylsilyl)propyl)ethylenediamine				
	oral	ATE 500 mg/kg			

##### Irritation and corrosivity

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

##### Sensitising effects

Contains N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane, N-(3(dimethoxymethylsilyl)propyl)ethylenediamine, Diocetyl tin acetylacetonate. May produce an allergic reaction.

##### 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

Endocrine disrupting potential: No information available.

##### Further information

There are no data available on the preparation/mixture itself.

### SECTION 12: Ecological information

#### 12.1. Toxicity

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No further relevant information available.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
2768-02-7	Vinyltrimethoxysilane					
	Acute fish toxicity	LC50	191 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	210 mg/l	72 h	Selenastrum capricornutum	
	Acute crustacea toxicity	EC50	169 mg/l	48 h	Daphnia magna (Big water flea)	
1760-24-3	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane					
	Acute fish toxicity	LC50	597 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute crustacea toxicity	EC50	81 mg/l	48 h	Daphnia magna (Big water flea)	

### 12.2. Persistence and degradability

No further relevant information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
1760-24-3	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane			
	OECD 301A	39%	28	
	Not readily biodegradable (according to OECD criteria)			

### 12.3. Bioaccumulative potential

No further relevant information available.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2768-02-7	Vinyltrimethoxysilane	1,1

### 12.4. Mobility in soil

No further relevant information available.

### 12.5. Results of PBT and vPvB assessment

not applicable

### 12.6. Endocrine disrupting properties

Endocrine disrupting potential: No information available.

### 12.7. Other adverse effects

No further relevant information available.

#### Further information

There are no data available on the mixture itself.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Dispose of waste according to applicable legislation.

Do not mix with other wastes.

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



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080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

#### List of Wastes Code - contaminated packaging

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

#### Contaminated packaging

Dispose of waste according to applicable legislation.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.
Marine pollutant:	no

#### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

not applicable

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

not applicable

### SECTION 15: Regulatory information

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

EU regulatory information

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2004/42/EC (VOC): 2,40 %  
37,9 g/l

### Additional information

Observe in addition any national regulations!

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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

### Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

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

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H330 Fatal if inhaled.  
H332 Harmful if inhaled.  
H371 May cause damage to organs.  
H373 May cause damage to organs through prolonged or repeated exposure.  
EUH208 Contains N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane, N-(3(dimethoxymethylsilyl)propyl)ethylenediamine, Dioctyltin acetylacetonate. May produce an allergic reaction.  
EUH210 Safety data sheet available on request.

### 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.

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