

according to Regulation (EC) No 1907/2006

### Superdur-Verdünner 5D402

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

#### 1.1. Product identifier

Superdur-Verdünner 5D402

Product group: Produkt

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

#### Use of the substance/mixture

thinner

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

Company name: Bergolin GmbH & Co. KG

Street: Sachsenring 1

Place: D-27711 Osterholz-Scharmbeck

Telephone: +49 4795 95899 0 Telefax: 04795-95899-170

e-mail: info@bergolin.de

Contact person: M. Gloede Telephone: +49 541 93701-22

e-mail: sdb@bergolin.de Internet: www.bergolin.de

Responsible Department: Sicherheitsdatenblattverwaltung

**1.4. Emergency telephone** +49 4795 95899 0

number: Only available during office hours. (8-16 CET)

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

## 2.1. Classification of the substance or mixture

### Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3 Aspiration hazard: Asp. Tox. 1

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - single exposure: STOT SE 3 Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Flammable liquid and vapour.

May be fatal if swallowed and enters airways.

May cause respiratory irritation. May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

## Hazard components for labelling

Solvent naphtha (petroleum), light aromomatic

xylene ethylbenzene toluene

Signal word: Danger

Pictograms:











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#### **Hazard statements**

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P235 Keep cool.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

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

## 3.2. Mixtures

#### Chemical characterization

Mixture of organic solvents

### **Hazardous components**

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification	•	•		
108-65-6	2-methoxy-1-methylethyl acetat	e		45 - < 50 %	
	203-603-9	607-195-00-7			
	Flam. Liq. 3; H226				
64742-95-6	Solvent naphtha (petroleum), lig	ht aromomatic		40 - < 45 %	
	918-668-5		01-2119455851-35		
	Flam. Liq. 3, STOT SE 3, STOT H411 EUH066	SE 3, Asp. Tox. 1, Aquatic Chronic 2; H	H226 H335 H336 H304		
1330-20-7	xylene		5 - < 10 %		
	215-535-7		01-2119486136-34		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 1; H226 H332 H312 H315	e Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT H319 H335 H373 H304	SE 3, STOT RE 2, Asp.		
100-41-4	ethylbenzene			1 - < 5 %	
	202-849-4	601-023-00-4	01-2119489370-35		
	Flam. Liq. 2, Acute Tox. 4, STO H412	T RE 2, Asp. Tox. 1, Aquatic Chronic 3;	H225 H332 H373 H304		
70657-70-4	2-methoxypropyl acetate		< 1 %		
	274-724-2	607-251-00-0			
	Flam. Liq. 3, Repr. 1B, STOT S	E 3; H226 H360D H335			

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

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

## 4.1. Description of first aid measures

### **General information**

In all cases of doubt, or when symptoms persist, seek medical advice.

Never give anything by mouth to an unconscious person or a person with cramps.

If unconscious place in recovery position and seek medical advice.



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#### After inhalation

Remove casualty to fresh air and keep warm and at rest.

In case of irregular breathing or respiratory arrest provide artificial respiration.

#### After contact with skin

Change contaminated clothing.

Wash with plenty of water/.?.

Do not wash with: Solvent/Thinner.

### After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Seek medical advice immediately.

#### After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

Call a physician immediately.

Put victim at rest, cover with a blanket and keep warm.

Do NOT induce vomiting.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

alcohol resistant foam. Carbon dioxide. Powder. Water fog.

#### Unsuitable extinguishing media

High power water jet.

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

Burning produces heavy smoke.

Hazardous decomposition products: Danger of serious damage to health by prolonged exposure.

Use appropriate respiratory protection.

### 5.3. Advice for firefighters

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

Do not allow water used to extinguish fire to enter drains or waterways.

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

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

Keep away from sources of ignition - No smoking. Ventilate affected area.

Avoid breathing dust/fume/gas/mist/vapours/spray.

See protective measures under point 7 and 8.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

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).

Collect in closed containers for disposal.

Clean with detergents. Avoid solvent cleaners.

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Avoid release to the environment. In use, may form flammable/explosive vapour-air mixture.

Only use the material in places where open light, fire and other flammable sources can be kept away.

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Provide earthing of containers,



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equipment, pumps and ventilation facilities. Use non-sparking tools. Wear antistatic work clothing.

Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray. When using do not eat, drink or smoke. Wear personal protection equipment.

Never use pressure to empty container. Keep/Store only in original container.

Do not allow to enter into surface water or drains.

#### Advice on protection against fire and explosion

Vapours are heavier than air and will spread at floor level.

Vapours may form explosive mixtures with air.

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

### Hints on joint storage

Do not store together with: Oxidizing agents. Strong acid, strong alkalis

### Further information on storage conditions

Notice the directions for use on the label.

Keep container tightly closed in a cool, well-ventilated place. Protect from sunlight. Keep away from sources of ignition - No smoking. Store in a place accessible by authorized persons only. Always close containers tightly after the removal of product.

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

## 8.1. Control parameters

#### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

### **Biological Monitoring Guidance Values (EH40)**

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift



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## **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
108-65-6	2-methoxy-1-methylethyl acetate			
Worker DNEL,	long-term	dermal	systemic	153,5 mg/kg bw/day
Worker DNEL,	long-term	inhalation	systemic	275 mg/m³
Consumer DN	EL, long-term	dermal	systemic	54,8 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	33 mg/m³
Consumer DN	EL, long-term	oral	systemic	1,67 mg/kg bw/day
64742-95-6	Solvent naphtha (petroleum), light aromomatic			
Worker DNEL,	long-term	dermal	systemic	25 mg/kg bw/day
Worker DNEL,	long-term	inhalation	systemic	150 mg/m³
Consumer DN	EL, long-term	oral	systemic	11 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	32 mg/m³
1330-20-7	xylene			
Worker DNEL,	acute	inhalation	systemic	289 mg/m³
Worker DNEL,	long-term	inhalation	systemic	77 mg/m³
Worker DNEL,	acute	inhalation	local	289 mg/m³
Worker DNEL,	long-term	inhalation	local	77 mg/m³
Consumer DN	EL, acute	inhalation	systemic	174 mg/m³
Consumer DN	EL, acute	inhalation	local	174 mg/m³
Consumer DN	EL, long-term	inhalation	systemic	14,8 mg/m³
Consumer DN	EL, long-term	oral	systemic	1,6 mg/kg bw/day
Consumer DN	EL, long-term	dermal	systemic	108 mg/kg bw/day
100-41-4	ethylbenzene			
Worker DNEL,	long-term	inhalation	systemic	77 mg/m³
Worker DNEL,	long-term	inhalation	local	293 mg/m³
Worker DNEL, long-term		dermal	systemic	180 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	15 mg/m³
Consumer DN	EL, long-term	oral	systemic	1,6 mg/kg bw/day



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#### **PNEC values**

CAS No	Substance	
Environmen	al compartment	Value
108-65-6	2-methoxy-1-methylethyl acetate	
Freshwater		0,635 mg/l
Marine wate		0,0635 mg/l
Freshwater	sediment	3,29 mg/kg
Marine sediment		0,329 mg/kg
Soil		0,29 mg/kg
1330-20-7	xylene	
Freshwater		0,1 mg/l
Marine wate	Marine water	
Freshwater sediment		13,7 mg/kg
Marine sediment		1,37 mg/kg
Micro-organ	Micro-organisms in sewage treatment plants (STP)	
Soil		

#### 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.

#### Eye/face protection

Wear eye/face protection.

#### **Hand protection**

Wear protective gloves. Replace when worn. 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. Observe the wear time limits as specified by the manufacturer.

Suitable material: butyl rubber or Viton (necessarily consider the permanence of the material and See information supplied by the manufacturer.)

Breakthrough time (maximum wearing time): min.

Use protective skin cream before handling the product.

#### Skin protection

Wear antistatic work clothing. (Natural fibres (e.g. cotton)/ heat-resistant synthetic fibres)

#### Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values.

### **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: liquid Colour: colourless



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Odour: characteristic

Test method

Changes in the physical state

Initial boiling point and boiling range: 140 °C

Flash point: 25 °C DIN 53213

Lower explosion limits:0,8 vol. %Upper explosion limits:10,6 vol. %Ignition temperature:315 °CVapour pressure:10 hPa

(at 20 °C)

Vapour pressure: 21 hPa

(at 50 °C)

Density (at 20 °C): 0,92 g/cm³ DIN 53217

Flow time: 8

(at 20 °C)

Solvent separation test: <3 % (ADR/RID)
Solvent content: 100,00 %

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

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Oxidizing agent, Strong acid, Strong alkali

## 10.4. Conditions to avoid

In case of warming: Thermal decomposition.

### 10.6. Hazardous decomposition products

Carbon monoxide Carbon dioxide. Nitrogen oxides (NOx).

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

### **Acute toxicity**

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



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CAS No	Chemical name	Chemical name							
	Exposure route	Dose		Species	Source	Method			
108-65-6	2-methoxy-1-methylethyl	acetate							
	oral	LD50 mg/kg	8532	Rat	RTECS				
	dermal	LD50 mg/kg	7500	Rabbit					
64742-95-6	Solvent naphtha (petrole	um), light arc	momatic						
	oral	LD50 mg/kg	>2000	Ratte					
	dermal	LD50 mg/kg	>2000	Kaninchen					
1330-20-7	xylene								
	oral	LD50 mg/kg	>2000	Rat					
	dermal	ATE mg/kg	1100						
	inhalation vapour	LC50	6350 mg/l						
	inhalation (4 h) aerosol	LC50	1,5 mg/l						
100-41-4	ethylbenzene								
	oral	LD50 mg/kg	3500	Rat	GESTIS				
	dermal	LD50 mg/kg	15400	Rabbit					
	inhalation (4 h) vapour	LC50	17,2 mg/l	Rat					
	inhalation aerosol	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

May cause respiratory irritation. (Solvent naphtha (petroleum), light aromomatic)
May cause drowsiness or dizziness. (Solvent naphtha (petroleum), light aromomatic)

### STOT-repeated exposure

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

### **Aspiration hazard**

May be fatal if swallowed and enters airways.

### **Practical experience**

## Observations relevant to classification

Following inhalation:

May cause respiratory irritation. Potential hazards: Liver and kidney damage. Depression of the central nervous system. Symptoms: Headache. Dizziness. Causes drowsiness or dizziness. unconsciousness.

#### After skin contact:

The product is skin resorptive. Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

Following eye contact:



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Irritating to eyes. (reversible.)

after ingestion:

Nausea. vomiting. gastro-intestinal ailment.

#### **Further information**

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

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

## **SECTION 12: Ecological information**

## 12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
108-65-6	2-methoxy-1-methylethyl	acetate					
	Acute fish toxicity	LC50	161 mg/l	96 h	Pimephales promelas		
	Acute crustacea toxicity	EC50	408 mg/l	48 h	Daphnia magna		
1330-20-7	xylene						
	Acute fish toxicity	LC50 mg/l	26,7	96 h	Pimephales promelas		
	Acute algae toxicity	ErC50	2,2 mg/l		Pseudokirchnerella subcapitata		
	Fish toxicity	NOEC mg/l	>1,3	56 d			
	Crustacea toxicity	NOEC mg/l	1,57	21 d			
100-41-4	ethylbenzene						
	Acute fish toxicity	LC50	5,1 mg/l	96 h	Menidia menidia		
	Acute algae toxicity	ErC50	4,9 mg/l		Skeletonema costatum		
	Acute crustacea toxicity	EC50	2,0 mg/l	48 h	Daphnia magna		

## 12.2. Persistence and degradability

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation	-	-	-	
1330-20-7	xylene				
	OECD Guideline 301 F (Manometric Respirometry)	68%	28		
	readily biodegradable				
100-41-4	ethylbenzene				
	ISO 14593-CO2-Headspace Test	70-80%	28		
	readily biodegradable				

## 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-65-6	2-methoxy-1-methylethyl acetate	0,43
100-41-4	ethylbenzene	3,15

### **Further information**

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

Do not allow to enter into surface water or drains.



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### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### **Disposal recommendations**

Do not allow to enter into surface water or drains.

Remove according to the regulations.

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

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08);

waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent

mixtures; hazardous waste

### Contaminated packaging

Completely emptied packages can be recycled.

Remove according to the regulations.

### **SECTION 14: Transport information**

## Land transport (ADR/RID)

**14.1. UN number:** UN 1263

14.2. UN proper shipping name: Paint related material

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Special Provisions: 163 367 640E 650

Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Marine transport (IMDG)

**14.1. UN number:** UN 1263

14.2. UN proper shipping name: Paint related material

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Marine pollutant:

Special Provisions: 163, 223, 367, 955

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1263

14.2. UN proper shipping name: Paint related material



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14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Special Provisions: A3 A72 A192

Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1

IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Solvent naphtha (petroleum), light aromomatic

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

## **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 28: Solvent naphtha (petroleum), light aromomatic

Entry 30: 2-methoxypropyl acetate

Entry 40: xylene

2010/75/EU (VOC): 99,9 % (919,08 g/l) 2004/42/EC (VOC): 100 % (920 g/l)

Information according to 2012/18/EU

(SEVESO III):

E2 Hazardous to the Aquatic Environment

Additional information: P5c

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

**Additional information** 

Observe in addition any national regulations!

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

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.



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H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360D	May damage the unborn child.

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

H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

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