

## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

#### TOP SATIN

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

##### Relevant identified uses of the substance or mixture:

Hard coating

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU12 - Manufacture of plastics products, including compounding and conversion

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC 9a - Coatings and paints, thinners, paint removers

PC32 - Polymer preparations and compounds

Process category [PROC]:

PROC 8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC10 - Roller application or brushing

PROC19 - Hand-mixing with intimate contact and only PPE available

Environmental Release Category [ERC]:

ERC 8a - Wide dispersive indoor use of processing aids in open systems

ERC 8b - Wide dispersive indoor use of reactive substances in open systems

##### Uses advised against:

No information available at present.

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

Dr. Schnell Chemie GmbH, Taunusstr. 19, D -80807 München

Telephone 089/350608-0, Fax 089/350608-47

info@dr-schnell.com

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

#### 1.4 Emergency telephone

##### Advisory office in case of poisoning:

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##### Telephone number of the company in case of emergencies:

Tel.: +49 (0) 700 / 24 112 112 (DSC)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### 2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not determined

##### 2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).

The mixture is not classified as dangerous in the terms of the directive 1999/45/EC.

#### 2.2 Label elements

##### 2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

Not determined

##### 2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments).

Symbols: Not applicable

Indications of danger: ---

R-phrases:

S-phrases:

Additions:

Safety data sheet available for professional user on request.

### 2.3 Other hazards

The mixture contains no vPvB substance (vPvB = very persistent, very bioaccumulative).

The mixture contains no PBT substance (PBT = persistent, bioaccumulative, toxic).

## SECTION 3: Composition/information on ingredients

Water-based polymer dispersion

### 3.1 Substance

n.a.

### 3.2 Mixture

2-(2-Ethoxyethoxy)ethanol	
Registration number (ECHA)	-
Index	---
EINECS, ELINCS	203-919-7
CAS	CAS 111-90-0
content %	1-10
Symbol	Xi
R-phrases	36
Classification categories / Indications of danger	Irritant
Hazard class/Hazard category	<b>Hazard statement</b>
Eye Irrit./2	H319

Tris(2-butoxyethyl) phosphate	
Registration number (ECHA)	-
Index	---
EINECS, ELINCS	201-122-9
CAS	CAS 78-51-3
content %	1-<5
Symbol	---
R-phrases	52-53
Classification categories / Indications of danger	Dangerous for the environment
Hazard class/Hazard category	<b>Hazard statement</b>
Aquatic Chronic/3	H412

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Inhalation

Supply person with fresh air.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

#### Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Rinse the mouth thoroughly with water.

Give copious water to drink - consult doctor immediately.

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

Where relevant delayed occurring symptoms and effects will be found in section 11. or at the exposure routes under section 4.1.

The following may occur:

Skin irritation possible with prolonged contact.

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

n.c.

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

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Adapt to the nature and extent of fire.

##### **Unsuitable extinguishing media**

n.c.

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

In case of fire the following can develop:

Oxides of carbon

Oxides of phosphorus

Toxic pyrolysis products.

#### **5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

Dispose of contaminated extinction water according to official regulations.

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

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

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

If applicable, caution - risk of slipping

#### **6.2 Environmental precautions**

If leakage occurs, dam up.

Prevent surface and ground-water infiltration, as well as ground penetration.

Do not pour down the drain undiluted.

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

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

Flush residue using copious water.

#### **6.4 Reference to other sections**

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

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

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

#### **7.1 Precautions for safe handling**

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Protect from frost.

#### **7.3 Specific end use(s)**

No information available at present.

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

#### **8.1 Control parameters**

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## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.  
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.  
 Applies only if maximum permissible exposure values are listed here.

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

General hygiene measures for the handling of chemicals are applicable.  
 Wash hands before breaks and at end of work.  
 Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

Skin protection - Hand protection:

Normally not necessary.

With long-term contact:

If applicable

Rubber gloves (EN 374).

Protective hand cream recommended.

Skin protection - Other:

Usual protective working garments

Respiratory protection:

Normally not necessary.

Thermal hazards:

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	8,5
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	~100 °C
Flash point:	>100 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined

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Density: ~1 g/ml  
 Bulk density: Not determined  
 Solubility(ies): Not determined  
 Water solubility: Soluble  
 Partition coefficient (n-octanol/water): Not determined  
 Auto-ignition temperature: Not determined  
 Decomposition temperature: Not determined  
 Viscosity: Not determined  
 Explosive properties: Not determined  
 Oxidising properties: Not determined

**9.2 Other information**

Miscibility: Not determined  
 Fat solubility / solvent: Not determined  
 Conductivity: Not determined  
 Surface tension: Not determined  
 Solvents content: Not determined

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

See also Subsection 10.4 to 10.6.  
 The product has not been tested.

**10.2 Chemical stability**

See also Subsection 10.4 to 10.6.  
 Stable with proper storage and handling.

**10.3 Possibility of hazardous reactions**

See also Subsection 10.4 to 10.6.  
 No decomposition if used as intended.

**10.4 Conditions to avoid**

See also section 7.

**10.5 Incompatible materials**

No dangerous reactions are known.

**10.6 Hazardous decomposition products**

See also Subsection 10.4 to 10.6.  
 See also section 5.2  
 No decomposition when used as directed.

**SECTION 11: Toxicological information**

Classification according to calculation procedure.

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Toxicity/effect	Endpoi nt	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.

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Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.

2-(2-Ethoxyethoxy)ethanol						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	5500	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	6000	mg/kg	Rat		
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Irritant
Respiratory or skin sensitisation:						No indications of such an effect.
Symptoms:						acidosis, respiratory distress, diarrhoea, coughing, mucous membrane irritation, dizziness, nausea and vomiting.

Tris(2-butoxyethyl) phosphate						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Skin corrosion/irritation:						Slightly irritant
Serious eye damage/irritation:						Slightly irritant

## SECTION 12: Ecological information

TOP SATIN							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

2-(2-Ethoxyethoxy)ethanol							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>1000 0	mg/l			
Toxicity to daphnia:	EC50	48h	3940- 4670	mg/l	(Daphnia magna)		
Persistence and degradability:		28d	90	%		OECD-Screening-Test(modif.)	
Bioaccumulative potential:	Log Pow		0,54				
Toxicity to bacteria:	EC10	16h	4000	mg/l	(Pseudomonas putida)		

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<b>Tris(2-butoxyethyl) phosphate</b>							
<b>Toxicity/effect</b>	<b>Endpoint</b>	<b>Time</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Toxicity to fish:	LC50	96h	10-100	mg/l	(Brachydanio rerio)	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	96h	10-100	mg/l	(Daphnia magna)		
Persistence and degradability:			>80	%		OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	
Other ecotoxicological data:	DOC		530	mg/g			
Other ecotoxicological data:	COD		1839	mg/g			

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

07 06 01 aqueous washing liquids and mother liquors  
 20 01 29 detergents containing dangerous substances

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

##### For contaminated packing material

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

15 01 02 plastic packaging

### SECTION 14: Transport information

#### General statements

UN number: n.a.  
 UN proper shipping name:  
 Transport hazard class(es): n.a.  
 Packing group: n.a.  
 Classification code: n.a.  
 LQ (ADR 2011): n.a.  
 LQ (ADR 2009): n.a.  
 Environmental hazards: Not applicable  
 Tunnel restriction code:

#### Transport by sea (IMDG-code)

UN proper shipping name:  
 Transport hazard class(es): n.a.  
 Packing group: n.a.  
 Marine Pollutant: n.a.  
 Environmental hazards: Not applicable

#### Transport by air (IATA)

UN proper shipping name:  
 Transport hazard class(es): n.a.  
 Packing group: n.a.  
 Environmental hazards: Not applicable

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### Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

### Additional information:

Non-dangerous material according to Transport Regulations.

## SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions: Yes

### 15.2 Chemical safety assessment

No information available at present.

## SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: 1 - 16

Product code for cleaning and care products (D):

GE 20

The following statements are the indicated R-phrases / H-phrases and classification codes (GHS/CLP) for the ingredients (listed in Section 3).

36 Irritating to eyes.

52 Harmful to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Eye Irrit.-Eye irritation

Aquatic Chronic-Hazardous to the aquatic environment - chronic

## Legend:

AC = Article Categories

ACGIH = American Conference of Governmental Industrial Hygienists

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOX = Adsorbable organic halogen compounds

Art. no. = Article number

ATE = Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAG = Bundesamt für Gesundheit = Federal Office of Public Health (FOPH), Switzerland

BAM = Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA = Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF = Bioconcentration factor

BGV = Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BMGV = Biological monitoring guidance value (EH40, UK)

CAS = Chemical Abstracts Service

CESIO = Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

ChemRRV = (= Observe Chemikalien-Risikoreduktions-Verordnung)

CIPAC = Collaborative International Pesticides Analytical Council

CLP = Classification, Labelling and Packaging

CMR = carcinogenic, mutagenic, reproductive toxic

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

CTFA = Cosmetic, Toiletry, and Fragrance Association

DMEL = Derived Minimum Effect Level

DNEL = Derived No Effect Level

DOC = Dissolved Organic Carbon

DVS = Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)



e.g. = for example

EC = Effective Concentration

EC = European Community

ECHA = European Chemicals Agency

EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified Chemical Substances

EPA = Environmental Protection Agency (USA)

ERC = Environmental Release Categories

ES = Exposure scenario

etc. = et cetera

EWC = European Waste Catalogue

Fax. = Fax number

gen. = general

GWP = Global warming potential

HET-CAM = Hen's Egg Test - Chorionallantoic Membrane

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IC = Inhibitory concentration

IMDG-Code = International Maritime Dangerous Goods Code

incl. = included

LC = lethal concentration

LC50 = lethal concentration 50 percent kill

LCLo = lowest published lethal concentration

LD50 = Lethal Dose, 50%

LDLo = Lethal Dose Low

LOAEL = Lowest Observed Adverse Effect Level

LOEC = Lowest Observed Effect Concentration

LOEL = Lowest Observed Effect Level

LQ = Limited Quantities

n.a. = not applicable

n.av. = not available

n.c. = not checked

n.d.a. = no data available

NIOSH = National Institute of Occupational Safety and Health

No. = Number

NOAEC = No Observed Adverse Effective Concentration

NOAEL = No Observed Adverse Effect Level

NOEL = No Observed Effect Level

Note. = Annotation

ODP = Ozone Depletion Potential

OECD = Organisation for Economic Co-operation and Development

PC = product category (= Chemical product category)

PE = Polyethylene

PNEC = Predicted No Effect Concentration

POCP = Photochemical ozone creation potential

ppm = parts per million

PROC = Process category

PTFE = Polytetrafluorethylene

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

SU = Sector of use

SVHC = Substances of Very High Concern

Tel. = Telephone

ThOD = Theoretical Oxygen Demand

TOC = Total Organic Carbon

TRGS = Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

VbF = Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC = Volatile organic compounds

vPvB = very Persistent, very Bioaccumulative

WEL-TWA, WEL-STEL = WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

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The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

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