

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

### 1.1 Product identifier

Trade name : Dörr-Titanol® V

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

Product use : Pretreatment agent, Product is not intended for consumer use

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

Company name of supplier : Sika Schweiz AG  
Tüffenwies 16  
8048 Zürich  
Telephone : +41 58 436 40 40  
Telefax : -  
E-mail address of person : EHS@ch.sika.com  
responsible for the SDS

### 1.4 Emergency telephone number

Tox Info Suisse  
CH-8028 Zurich  
+41(0)44 251 51 51 / Speed calling: 145

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Specific target organ toxicity - single exposure, Category 3, Central nervous system H336: May cause drowsiness or dizziness.

Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters airways.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : 

Signal word : Danger



Hazard statements	:	H226	Flammable liquid and vapour.
		H304	May be fatal if swallowed and enters airways.
		H336	May cause drowsiness or dizziness.
Precautionary statements	:	<b>Prevention:</b>	
		P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
		P261	Avoid breathing mist or vapours.
		<b>Response:</b>	
		P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
		P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
		P331	Do NOT induce vomiting.
		P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Hazardous components which must be listed on the label:**

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

**3.2 Mixtures**

**Components**

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not Assigned 919-857-5 01-2119463258-33-XXXX [corresponding group CAS 64742-48-9]	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) Asp. Tox. 1; H304	>= 40 - < 60



Substances with a workplace exposure limit :			
Asphalt	8052-42-4 232-490-9 01-2119480172-44- XXXX		>= 40 - < 60

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.  
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact : Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Do not induce vomiting without medical advice.  
Rinse mouth with water.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.

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

- Symptoms : Aspiration may cause pulmonary oedema and pneumonitis.  
Loss of balance  
Vertigo  
See Section 11 for more detailed information on health effects and symptoms.
- Risks : Risk of serious damage to the lungs (by aspiration).  
  
May be fatal if swallowed and enters airways.  
May cause drowsiness or dizziness.

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

- Treatment : Treat symptomatically.



## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : Water  
High volume water jet

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

Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.

Hazardous combustion products : No hazardous combustion products are known

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.

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## SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Remove all sources of ignition.  
Deny access to unprotected persons.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### 6.4 Reference to other sections

For personal protection see section 8.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

- Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8).  
 For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.  
 Take precautionary measures against static discharge.  
 Open drum carefully as content may be under pressure.  
 Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).  
 Follow standard hygiene measures when handling chemical products
  
- Advice on protection against fire and explosion : Use explosion-proof equipment. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Take precautionary measures against electrostatic discharges.
  
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with local regulations.
  
- Further information on storage stability : No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

- Specific use(s) : Consult most current local Product Data Sheet prior to any use.

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

**8.1 Control parameters**

**Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters *	Basis *
Asphalt	8052-42-4	TWA	5 mg/m3	CH SUVA
Further information: Toxic by skin resorption possible; Substances, which are easily absorbed through the skin, can give by additional skin resorption a substantial higher risk compared to only inhalation by the airways., Carcinogenic Category 3, BIA				



		STEL	20 mg/m <sup>3</sup>	CH SUVA
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\*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

## 8.2 Exposure controls

### Engineering measures

Maintain air concentrations below occupational exposure standards.  
Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

- Eye/face protection : Safety glasses with side-shields conforming to EN166  
Eye wash bottle with pure water
- Hand protection : Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
- Suitable for short time use or protection against splashes:  
Butyl rubber/nitrile rubber gloves (> 0,1 mm)  
Contaminated gloves should be removed.  
Suitable for permanent exposure:  
Viton gloves (0.4 mm),  
breakthrough time >30 min.
- Skin and body protection : Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
organic vapor filter (Type A)  
A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm  
Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

### Environmental exposure controls

- General advice : Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties



Physical state : liquid  
Colour : black  
Odour : solvent-like  
Melting point/range / Freezing point : No data available  
Boiling point/boiling range : > 150 °C  
Flammability (solid, gas) : No data available

**Upper/lower flammability or explosive limits**

Upper explosion limit / Upper explosion limit  
per flammability limit 6,4 %(V)  
Lower explosion limit / Lower explosion limit  
Lower flammability limit 0,67 %(V)  
Flash point : ca. 36 °C  
Method: closed cup  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
pH : Not applicable  
substance/mixture is non-soluble (in water)

**Viscosity**

Viscosity, kinematic : < 20,5 mm<sup>2</sup>/s (40 °C)

**Solubility(ies)**

Water solubility : insoluble  
Partition coefficient: n-octanol/water : No data available  
Vapour pressure : No data available  
Density : ca. 0,90 g/cm<sup>3</sup> (20 °C)



Relative vapour density : No data available

Particle characteristics : No data available

## 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

The product is chemically stable.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : No data available

### 10.6 Hazardous decomposition products

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No hazardous decomposition products are known.

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## SECTION 11: Toxicological information

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

#### Acute toxicity

Not classified due to lack of data.

#### Components:

#### Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 3.160 mg/kg





**Skin corrosion/irritation**

Not classified due to lack of data.

**Serious eye damage/eye irritation**

Not classified due to lack of data.

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified due to lack of data.

**Respiratory sensitisation**

Not classified due to lack of data.

**Germ cell mutagenicity**

Not classified due to lack of data.

**Carcinogenicity**

Not classified due to lack of data.

**Reproductive toxicity**

Not classified due to lack of data.

**STOT - single exposure**

May cause drowsiness or dizziness.

**STOT - repeated exposure**

Not classified due to lack of data.

**Aspiration toxicity**

May be fatal if swallowed and enters airways.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**Components:**

**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics:**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1.000 mg/l  
Exposure time: 48 h



**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

**12.6 Endocrine disrupting properties**

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12.7 Other adverse effects**

**Product:**

Additional ecological information : There is no data available for this product.

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**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Product : The generation of waste should be avoided or minimized wherever possible.  
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.  
Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.  
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.  
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste code Switzerland : 08 01 11 -  
VeVA/LVA



Contaminated packaging : 15 01 10 [S] packaging containing residues of or contaminated by dangerous substances

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## SECTION 14: Transport information

### 14.1 UN number or ID number

**ADR** : UN 1139  
**IMDG** : UN 1139  
**IATA** : UN 1139

### 14.2 UN proper shipping name

**ADR** : COATING SOLUTION  
**IMDG** : COATING SOLUTION  
**IATA** : Coating solution

### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
<b>ADR</b>	: 3	
<b>IMDG</b>	: 3	
<b>IATA</b>	: 3	

### 14.4 Packing group

**ADR**  
Packing group : III  
Classification Code : F1  
Hazard Identification Number : 30  
Labels : 3  
Tunnel restriction code : (D/E)

**IMDG**  
Packing group : III  
Labels : 3  
EmS Code : F-E, S-E

**IATA (Cargo)**  
Packing instruction (cargo aircraft) : 366  
Packing instruction (LQ) : Y344  
Packing group : III  
Labels : Flammable Liquids

**IATA (Passenger)**  
Packing instruction (passenger aircraft) : 355  
Packing instruction (LQ) : Y344  
Packing group : III



Labels : Flammable Liquids

#### 14.5 Environmental hazards

##### ADR

Environmentally hazardous : no

##### IMDG

Marine pollutant : no

##### IATA (Passenger)

Environmentally hazardous : no

##### IATA (Cargo)

Environmentally hazardous : no

#### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

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### SECTION 15: Regulatory information

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

International Chemical Weapons Convention (CWC) : Not applicable  
Schedules of Toxic Chemicals and Precursors

REACH Information: All substances contained in our Products are  
- registered by our upstream suppliers, and/or  
- registered by us, and/or  
- excluded from the regulation, and/or  
- exempted from the registration.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 3

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : None of the components are listed (=> 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable



PIC Ordinance, ChemPICO (814.82)	:	Not applicable
Chemical Risk Reduction Ordinance (ORRChem, SR 814.81)	:	See respective Annex to the Chemical Risk Reduction Ordinance (ORRChem, 814.81) for Conditions of Restriction.
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.		
P5c		FLAMMABLE LIQUIDS
Volatile organic compounds	:	Law on the incentive tax for volatile organic compounds (VOCV) Volatile organic compounds (VOC) content: 46,5% w/w
		Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 46,5% w/w

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

## SECTION 16: Other information

### Full text of H-Statements

H226	:	Flammable liquid and vapour.
H304	:	May be fatal if swallowed and enters airways.
H336	:	May cause drowsiness or dizziness.

### Full text of other abbreviations

Asp. Tox.	:	Aspiration hazard
Flam. Liq.	:	Flammable liquids
STOT SE	:	Specific target organ toxicity - single exposure
CH SUVA	:	Switzerland. Limit values at the work place
CH SUVA / TWA	:	Time Weighted Average
CH SUVA / STEL	:	Short Term Exposure Limit
ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	:	Chemical Abstracts Service
DNEL	:	Derived no-effect level
EC50	:	Half maximal effective concentration
GHS	:	Globally Harmonized System
IATA	:	International Air Transport Association
IMDG	:	International Maritime Code for Dangerous Goods
LD50	:	Median lethal dose (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50	:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL	:	International Convention for the Prevention of Pollution from



	Ships, 1973 as modified by the Protocol of 1978
OEL	: Occupational Exposure Limit
PBT	: Persistent, bioaccumulative and toxic
PNEC	: Predicted no effect concentration
REACH	: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency
SVHC	: Substances of Very High Concern
vPvB	: Very persistent and very bioaccumulative

**Further information**

**Classification of the mixture:**

Flam. Liq. 3	H226
STOT SE 3	H336
Asp. Tox. 1	H304

**Classification procedure:**

Based on product data or assessment
Calculation method
Calculation method

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

|| Changes as compared to previous version !

CH / EN