

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**VOSSCHEMIE**

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

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

#### 1.1 Product identifier

Trade name : Carsystem S.21 1K Primer schwarz  
Product code : CS158109

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

Use of the Sub- : Primer  
stance/Mixture  
Recommended restrictions : Industrial use, professional use  
on use

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

Company : Vosschemie GmbH  
Esinger Steinweg 50  
25436 Uetersen  
Germany  
info@vosschemie.de

Telephone : 04122 717 0  
Telefax : 04122 717158

**Responsible Department** : Laboratory  
04122 717 0  
sds@vosschemie.de

#### 1.4 Emergency telephone

Telephone : Giftinformationszentrum (GIZ)-Nord, Göttingen, Deutschland  
0551 19240

#### **IMPORTED BY:**

**Sydney Automotive Paints & Equipment PTY LTD Unit A3, 366 Edgar St. Condell Park NSW 2200 AUSTRALIA, Tel. +02 9772 9000 , +02 9772 9001 .**

**Emergency telephone number: If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131 126, New Zealand 0800 764 766**

## Carsystem S.21 1K Primer schwarz

Version 2.1AUS DE / EN Revision Date: 22.11.2023 Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Aerosols, Category 1	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.

#### 2.2 Label elements

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

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H336 May cause drowsiness or dizziness.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.  
Buildup of explosive mixtures possible without sufficient ventilation.

Precautionary Statements : P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.

**Prevention:**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ eye protection/ face protection.

**Response:**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version 2.1AUS DE / EN Revision Date: 22.11.2023 Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

### Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

### Disposal:

P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

### Hazardous ingredients which must be listed on the label:

acetone

butan-1-ol

propan-1-ol

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $700 \leq 1200$ )

### 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.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : aerosol  
Mixture

### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
acetone	67-64-1 200-662-2 606-001-00-8 01-2119471330-49	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous	$\geq 10 - < 25$

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**VOSSCHEMIE****Carsystem S.21 1K Primer schwarz**Version  
2.1AUS DE / ENRevision Date:  
22.11.2023Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

		system) EUH066	
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) EUH066	>= 10 - < 25
butan-1-ol	71-36-3 200-751-6 603-004-00-6 01-2119484630-38	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory system)  Acute toxicity estimate  Acute oral toxicity: 500 mg/kg	>= 5 - < 10
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 607-195-00-7 01-2119475791-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 1 - < 2,5
propan-1-ol	71-23-8 200-746-9 603-003-00-0 01-2119486761-29	Flam. Liq. 2; H225 Eye Dam. 1; H318 STOT SE 3; H336 (Central nervous system)	>= 1 - < 2,5
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700<=1200)	25068-38-6 500-033-5	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317  specific concentration limit Eye Irrit. 2; H319 >= 5 % Skin Irrit. 2; H315 >= 5 %	>= 1 - < 2,5
Substances with a workplace exposure limit :			
dimethyl ether	115-10-6 204-065-8 603-019-00-8 01-2119472128-37	Flam. Gas 1A; H220 Press. Gas Compr. Gas; H280	>= 25 - < 50

For explanation of abbreviations see section 16.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

- General advice : First aider needs to protect himself.  
Remove from exposure, lie down.  
If unconscious, place in recovery position and seek medical advice.  
Take off contaminated clothing and shoes immediately.
- If inhaled : Move to fresh air.  
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Get medical attention immediately.
- If swallowed : Swallowing is not regarded as a possible method for exposure.  
If symptoms persist, call a physician.

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

- Risks : May cause an allergic skin reaction.  
Causes serious eye damage.  
May cause drowsiness or dizziness.  
Repeated exposure may cause skin dryness or cracking.

#### 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 : Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Water spray jet  
Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet

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

- Specific hazards during fire fighting : Vapors may form explosive mixtures with air.  
Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

Hazardous combustion products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

### 5.3 Advice for firefighters

Special protective equipment for fire-fighters : Use personal protective equipment. Wear suitable respiratory protection equipment.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
Use water spray to cool unopened containers.  
In the event of fire and/or explosion do not breathe fumes.

---

## SECTION 6: Accidental release measures

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

Personal precautions : Wear personal protective equipment.  
Evacuate personnel to safe areas.  
Remove all sources of ignition.  
Ensure adequate ventilation.  
Avoid inhalation of vapor or mist.  
Avoid contact with skin, eyes and clothing.

### 6.2 Environmental precautions

Environmental precautions : Should not be released into the environment.  
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 : Ventilate the area.  
Use neutralizing agents.  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Local/Total ventilation : Ensure adequate ventilation.

Advice on safe handling : Pressurized container: Protect from sunlight and do not expose to temperatures exceeding 50°C / 122 °F. Also after use, do not open with force or burn.  
Provide sufficient air exchange and/or exhaust in work rooms.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version 2.1AUS DE / EN Revision Date: 22.11.2023 Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight.
- Hygiene measures : Do not inhale aerosol.  
Do not get in eyes.

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

- Requirements for storage areas and containers : Please observe the storage instructions for aerosols! Keep containers tightly closed in a cool, well-ventilated place. Keep away from direct sunlight. Keep away from heat and sources of ignition.
- Further information on storage conditions : Storage must be in accordance with the BetrSichV (Germany).
- Advice on common storage : Keep away from food and drink.
- Storage class (TRGS 510) : 2B

### 7.3 Specific end use(s)

- Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
dimethyl ether	115-10-6	TWA	1.000 ppm 1.920 mg/m <sup>3</sup>	2000/39/EC
		Further information: Indicative		
		AGW	1.000 ppm 1.900 mg/m <sup>3</sup>	DE TRGS 900
		Peak-limit category: 8;(II)		
acetone	67-64-1	TWA	500 ppm 1.210 mg/m <sup>3</sup>	2000/39/EC
		Further information: Indicative		
		AGW	500 ppm 1.200 mg/m <sup>3</sup>	DE TRGS 900
		Peak-limit category: 2;(I)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		
n-butyl acetate	123-86-4	AGW	62 ppm 300 mg/m <sup>3</sup>	DE TRGS 900
		Peak-limit category: 2;(I)		
		Further information: When there is compliance with the OEL and biological		

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**VOSSCHEMIE****Carsystem S.21 1K Primer schwarz**Version  
2.1AUS DE / ENRevision Date:  
22.11.2023Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

	tolerance values, there is no risk of harming the unborn child			
		STEL	150 ppm 723 mg/m <sup>3</sup>	2019/1831/E U
Further information: Indicative				
		TWA	50 ppm 241 mg/m <sup>3</sup>	2019/1831/E U
Further information: Indicative				
butan-1-ol	71-36-3	AGW	100 ppm 310 mg/m <sup>3</sup>	DE TRGS 900
Peak-limit category: 1;(I)				
Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
2-methoxy-1-methylethyl acetate	108-65-6	STEL	100 ppm 550 mg/m <sup>3</sup>	2000/39/EC
Further information: Identifies the possibility of significant uptake through the skin, Indicative				
		TWA	50 ppm 275 mg/m <sup>3</sup>	2000/39/EC
Further information: Identifies the possibility of significant uptake through the skin, Indicative				
		AGW	50 ppm 270 mg/m <sup>3</sup>	DE TRGS 900
Peak-limit category: 1;(I)				
Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

**Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
acetone	67-64-1	Acetone: 80 mg/l (Urine)	Immediately after exposure or after working hours	TRGS 903
butan-1-ol	71-36-3	1-butanol: 2 mg/g Creatinine (Urine)	Before next shift	TRGS 903
		1-butanol: 10 mg/g Creatinine (Urine)	Immediately after exposure or after working hours	TRGS 903

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Substance name	End Use	Routes of exposure	Potential health effects	Value
acetone	Workers	Inhalation	Long-term systemic effects	1210 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term local effects	2420 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	186 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	200 mg/m <sup>3</sup>
	Consumers	Skin contact, Oral	Long-term systemic effects	62 mg/kg bw/day

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**VOSSCHEMIE****Carsystem S.21 1K Primer schwarz**Version  
2.1AUS DE / ENRevision Date:  
22.11.2023Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

n-butyl acetate	Workers	Inhalation	Long-term systemic effects, Long-term local effects	300 mg/m <sup>3</sup>
	Workers	Inhalation	Acute systemic effects	600 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects, Acute systemic effects	11 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects, Long-term local effects	35,7 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute systemic effects	300 mg/m <sup>3</sup>
	Consumers	Dermal	Long-term systemic effects, Acute systemic effects	6 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects, Acute systemic effects	2 mg/kg bw/day
butan-1-ol	Workers	Inhalation	Long-term systemic effects	310 mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term systemic effects	55,357 mg/m <sup>3</sup>
	Consumers	Dermal		3,125 mg/kg bw/day
2-methoxy-1-methylethyl acetate	Workers	Inhalation	Long-term systemic effects	275 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	796 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	33 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	320 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	36 mg/kg bw/day
propan-1-ol	Workers	Inhalation	Long-term systemic effects	268 mg/m <sup>3</sup>
	Workers	Inhalation	Acute systemic effects	1723 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	136 mg/kg
	Consumers	Inhalation	Long-term systemic effects	80 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute systemic effects	1036 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	81 mg/kg
	Consumers	Oral	Long-term systemic effects	61 mg/kg

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

Substance name	Environmental Compartment	Value
----------------	---------------------------	-------

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version  
2.1AUS DE / EN

Revision Date:  
22.11.2023

Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

acetone	Fresh water	10,6 mg/l
	Sea water	1,06 mg/l
	Sewage treatment plant (STP)	100 mg/l
	Fresh water sediment	30,4 mg/kg dry weight (d.w.)
	Sea sediment	3,04 mg/kg dry weight (d.w.)
	Soil	29,5 mg/kg dry weight (d.w.)
n-butyl acetate	Fresh water	0,18 mg/l
	Sea water	0,018 mg/l
	Fresh water sediment	0,981 mg/kg dry weight (d.w.)
	Sea sediment	0,098 mg/kg dry weight (d.w.)
	Sewage treatment plant (STP)	35,6 mg/l
	Soil	0,09 mg/kg dry weight (d.w.)
butan-1-ol	Fresh water	0,082 mg/l
	Fresh water sediment	0,324 mg/kg dry weight (d.w.)
	Sea water	0,008 mg/l
	Sea sediment	0,032 mg/kg dry weight (d.w.)
	Sewage treatment plant (STP)	2476 mg/l
	Soil	0,017 mg/kg dry weight (d.w.)
2-methoxy-1-methylethyl acetate	Fresh water	0,635 mg/l
	Sea water	0,064 mg/l
	Sewage treatment plant (STP)	100 mg/l
	Fresh water sediment	3,29 mg/kg dry weight (d.w.)
	Sea sediment	0,329 mg/kg dry weight (d.w.)
	Soil	0,29 mg/kg dry weight (d.w.)
propan-1-ol	Fresh water	10 mg/l
	Sea water	1 mg/l
	Sewage treatment plant (STP)	96 mg/l
	Fresh water sediment	22,8 mg/kg
	Sea sediment	2,28 mg/kg
	Soil	2,2 mg/kg

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Tightly fitting safety goggles  
Safety glasses with side-shields conforming to EN166

#### Hand protection

Material : Nitrile rubber  
Directive : DIN EN 374

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version		Revision Date:	Date of last issue: 25.07.2022
2.1AUS	DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

Material	:	butyl-rubber
Break through time	:	< 15 min
Glove thickness	:	0,7 mm
Directive	:	DIN EN 374
Remarks	:	The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed. Preventive skin protection
Skin and body protection	:	Please wear suitable protective clothing, e.g. made of cotton or heat-resistant synthetic fibres. Long sleeved clothing
Respiratory protection	:	No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Filter type	:	Filter type A-P
Protective measures	:	Use only with adequate ventilation. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist.

### Environmental exposure controls

Soil	:	Avoid subsoil penetration.
Water	:	Do not flush into surface water or sanitary sewer system.

---

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	:	aerosol
Color	:	black
Odor	:	characteristic
Melting point/freezing point	:	not determined
Initial boiling point and boiling range	:	-24,9 °C
Upper explosion limit / Upper flammability limit	:	18,6 %(V)
Lower explosion limit / Lower flammability limit	:	1,2 %(V)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version		Revision Date:	Date of last issue: 25.07.2022
2.1AUS	DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

Flash point	:	-19 °C
Autoignition temperature	:	235 °C
pH	:	not determined substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Solubility(ies)		
Water solubility	:	immiscible
Partition coefficient: n-octanol/water	:	not determined
Vapor pressure	:	3.400 hPa
Density	:	0,871 g/cm <sup>3</sup> (20 °C)

### 9.2 Other information

Explosives	:	Not explosive In use, may form flammable/explosive vapor-air mixture.
Self-ignition	:	not auto-flammable

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if used as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions	:	Vapors may form explosive mixture with air.
---------------------	---	---

### 10.4 Conditions to avoid

Conditions to avoid	:	Keep away from heat and sources of ignition. Strong sunlight for prolonged periods.
---------------------	---	--

### 10.5 Incompatible materials

Materials to avoid	:	No data available
--------------------	---	-------------------

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version 2.1AUS DE / EN Revision Date: 22.11.2023 Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

---

### 10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

---

## SECTION 11: Toxicological information

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

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg  
Method: Calculation method

#### Components:

##### acetone:

Acute oral toxicity : LD50 Oral (Rat): 5.800 mg/kg

Acute inhalation toxicity : LC50 (Rat): ca. 76 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor

Acute dermal toxicity : LD50 Dermal (Rabbit): > 7.400 mg/kg

##### n-butyl acetate:

Acute oral toxicity : LD50 (Rat): 10.760 mg/kg  
Method: OECD Test Guideline 423

Acute inhalation toxicity : LD50 (Rat): > 21 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal (Rabbit): 14.112 mg/kg  
Method: OECD Test Guideline 402

##### butan-1-ol:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg  
Method: Converted acute toxicity point estimate  
Remarks: (\*) Converted acute toxicity point estimate according to Table 3.1.2 of Annex I.

Acute dermal toxicity : (Rabbit): 3.430 mg/kg  
Method: OECD Test Guideline 402

##### 2-methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 6.190 mg/kg  
Method: OECD Test Guideline 401

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5.000 mg/kg  
Method: OECD Test Guideline 402

### propan-1-ol:

Acute oral toxicity : LD50 Oral (Rat): ca. 8.000 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 33,8 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal (Rabbit): 4.032 mg/kg  
Method: OECD Test Guideline 402

### reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700<=1200):

Acute oral toxicity : LD50 Oral (Rat): 15.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 23.000 mg/kg

### Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

### Product:

Result : No skin irritation

### Serious eye damage/eye irritation

Causes serious eye damage.

### Respiratory or skin sensitization

#### Skin sensitization

May cause an allergic skin reaction.

#### Respiratory sensitization

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

#### STOT-single exposure

May cause drowsiness or dizziness.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

### Components:

#### **n-butyl acetate:**

Assessment : May cause drowsiness or dizziness.

#### **2-methoxy-1-methylethyl acetate:**

Routes of exposure : Oral  
Target Organs : Central nervous system  
Assessment : May cause drowsiness or dizziness.

#### **STOT-repeated exposure**

Not classified based on available information.

#### **Aspiration toxicity**

Not classified based on available information.

### 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.

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **acetone:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5.540 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 8.800 mg/l  
End point: mortality  
Exposure time: 48 h

Toxicity to algae/aquatic plants : NOEC (algae): 430 mg/l  
Exposure time: 96 h

Toxicity to microorganisms : EC10 (Bacteria): 1.000 mg/l  
Exposure time: 0,5 h  
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 2.212 mg/l  
Exposure time: 28 d  
Species: Daphnia magna (Water flea)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

Method: OECD Test Guideline 211

### **n-butyl acetate:**

- Toxicity to fish : (Pimephales promelas (fathead minnow)): 18 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 44 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 647,7 mg/l  
Exposure time: 72 h
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 23 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

### **2-methoxy-1-methylethyl acetate:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 130 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 500 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: Regulation (EC) No. 440/2008, Annex, C.2
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOEC: 47,5 mg/l  
Exposure time: 14 d  
Species: Oryzias latipes (Orange-red killifish)  
Method: OECD Test Guideline 204
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: >= 100 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

### **propan-1-ol:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4.555 mg/l  
End point: mortality  
Exposure time: 96 h  
Method: OECD Test Guideline 203

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version		Revision Date:	Date of last issue: 25.07.2022
2.1AUS	DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.644 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Method: DIN 38412
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 9.170 mg/l  
End point: Growth rate  
Exposure time: 48 h
- Toxicity to microorganisms : IC50 (Bacteria): > 1.000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 100 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

### reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $700 \leq 1200$ ):

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 2 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 1,8 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (algae): 11 mg/l  
Exposure time: 72 h

### Ecotoxicology Assessment

- Acute aquatic toxicity : This product has no known ecotoxicological effects.
- Chronic aquatic toxicity : This product has no known ecotoxicological effects.

## 12.2 Persistence and degradability

### Components:

#### acetone:

- Biodegradability : Result: Readily biodegradable.  
Biodegradation: 90,9 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

#### n-butyl acetate:

- Biodegradability : Result: Readily biodegradable.  
Biodegradation: 83 %  
Exposure time: 28 d

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

### **2-methoxy-1-methylethyl acetate:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 90 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

### **propan-1-ol:**

Biodegradability : Biodegradation: 83 - 92 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

## 12.3 Bioaccumulative potential

### Components:

#### **acetone:**

Bioaccumulation : Bioconcentration factor (BCF): 3  
Remarks: Calculation

Partition coefficient: n-octanol/water : log Pow: -0,24 (20 °C)

#### **n-butyl acetate:**

Partition coefficient: n-octanol/water : log Pow: 2,3 (25 °C)  
Method: OECD Test Guideline 117

#### **butan-1-ol:**

Partition coefficient: n-octanol/water : log Pow: 1,0 (25 °C)

#### **2-methoxy-1-methylethyl acetate:**

Partition coefficient: n-octanol/water : log Pow: 1,2 (20 °C)  
pH: 6,8  
Method: OECD Test Guideline 117

#### **propan-1-ol:**

Bioaccumulation : Bioconcentration factor (BCF): 0,88

Partition coefficient: n-octanol/water : Pow: 1,6 (25 °C)  
log Pow: 0,2 (25 °C)  
pH: 7

#### **dimethyl ether:**

Partition coefficient: n-octanol/water : log Pow: 0,07 (25 °C)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

### 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 : No data available

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : According to the European Waste Catalog, Waste Codes are not product specific, but application specific. Dispose of in conjunction with appropriate waste disposal authorities and in accordance with disposal regulations.

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:  
15 01 10, packaging containing residues of or contaminated by hazardous substances

---

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADG : UN 1950

ADN : UN 1950

ADR : UN 1950

RID : UN 1950

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version 2.1AUS DE / EN Revision Date: 22.11.2023 Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

**IMDG** : UN 1950

**IATA** : UN 1950

### 14.2 UN proper shipping name

**ADG** : AEROSOLS

**ADN** : AEROSOLS

**ADR** : AEROSOLS

**RID** : AEROSOLS

**IMDG** : AEROSOLS

**IATA** : Aerosols, flammable

### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
<b>ADG</b>	: 2	2.1
<b>ADN</b>	: 2	2.1
<b>ADR</b>	: 2	2.1
<b>RID</b>	: 2	2.1
<b>IMDG</b>	: 2.1	
<b>IATA</b>	: 2.1	

### 14.4 Packing group

**ADG**  
Packing group : Not assigned by regulation

**ADN**  
Packing group : Not assigned by regulation  
Classification Code : 5F  
Labels : 2.1

**ADR**  
Packing group : Not assigned by regulation  
Classification Code : 5F  
Labels : 2.1  
Tunnel restriction code : (D)

**RID**  
Packing group : Not assigned by regulation  
Classification Code : 5F  
Hazard Identification Number : 23  
Labels : 2.1

**IMDG**  
Packing group : Not assigned by regulation  
Labels : 2.1  
EmS Code : F-D, S-U

**IATA (Cargo)**  
Packing instruction (cargo aircraft) : 203

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

---

Packing instruction (LQ)	: Y203
Packing group	: Not assigned by regulation
Labels	: Flammable Gas

### IATA (Passenger)

Packing instruction (passenger aircraft)	: 203
Packing instruction (LQ)	: Y203
Packing group	: Not assigned by regulation
Labels	: Flammable Gas

### 14.5 Environmental hazards

#### ADG

Environmentally hazardous : no

#### ADN

Environmentally hazardous : no

#### ADR

Environmentally hazardous : no

#### RID

Environmentally hazardous : no

#### IMDG

Marine pollutant : 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.

---

## SECTION 15: Regulatory information

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

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 75 If you intend to use this product as tattoo ink, please contact your vendor.
--	--

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	: 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
---	------------------

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version	Revision Date:	Date of last issue: 25.07.2022
2.1AUS DE / EN	22.11.2023	Date of first issue: 25.07.2022

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

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. acetone (ANNEX II)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. P3a FLAMMABLE AEROSOLS

Water hazard class (Germany) : WGK 1 slightly water endangering  
Classification according to AwSV, Annex 1 (5.2)

Volatile organic compounds : Directive 2004/42/EC  
Volatile organic compounds (VOC) content: < 840 g/l  
VOC content for the product in a ready to use condition.

### Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### 15.2 Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

This Product is considered compliant to AIIIC (Australian Inventory of Industrial Chemicals).

## SECTION 16: Other information

### Full text of H-Statements

H220	: Extremely flammable gas.
H225	: Highly flammable liquid and vapor.
H226	: Flammable liquid and vapor.
H280	: Contains gas under pressure; may explode if heated.
H302	: Harmful if swallowed.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version 2.1AUS DE / EN Revision Date: 22.11.2023 Date of last issue: 25.07.2022  
Date of first issue: 25.07.2022

H335 : May cause respiratory irritation.  
H336 : May cause drowsiness or dizziness.  
EUH066 : Repeated exposure may cause skin dryness or cracking.

### Full text of other abbreviations

Acute Tox. : Acute toxicity  
Eye Dam. : Serious eye damage  
Eye Irrit. : Eye irritation  
Flam. Gas : Flammable gases  
Flam. Liq. : Flammable liquids  
Press. Gas : Gases under pressure  
Skin Irrit. : Skin irritation  
Skin Sens. : Skin sensitization  
STOT SE : Specific target organ toxicity - single exposure  
2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values  
2019/1831/EU : Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values  
DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.  
TRGS 903 : c - Biological limit values  
2000/39/EC / TWA : Limit Value - eight hours  
2000/39/EC / STEL : Short term exposure limit  
2019/1831/EU / TWA : Limit Value - eight hours  
2019/1831/EU / STEL : Short term exposure limit  
DE TRGS 900 / AGW : Time Weighted Average

ADG – Australian Dangerous Goods; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature;

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

## Carsystem S.21 1K Primer schwarz

Version		Revision Date:	Date of last issue: 25.07.2022
2.1AUS	DE / EN	22.11.2023	Date of first issue: 25.07.2022

SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Aerosol 1	H222, H229
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H336

#### Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN