

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

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

1.1 Product identifier

Trade name : Carsystem 2K Clear VOC HS/SR

Product code : 153.774 (151.909)

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

Use of the Sub-
stance/Mixture : Paints

Recommended restrictions
on use : Reserved for industrial and professional 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 number

Telephone : POISONS INFORMATION CENTRE
Australia

13 11 26

1.5 Details of the supplier/importer

Company : Sydney Automotive Paints and Equipment
Unit A3, 366 Edgar Street
Condell Park, 2200

reception@sape.com.au

Telephone : 02 9772 9000
Telefax : 02 9772 9001

Responsible Department : Marketing
02 9772 9000

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

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.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, 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.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist or vapours.
P271 Use only outdoors or in a well-ventilated area.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

Disposal:

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

Hazardous components which must be listed on the label:

n-butyl acetate

xylene

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336	>= 10 - < 20
xylene	1330-20-7 215-535-7 601-022-00-9 01-2119488216-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 STOT RE 2; H373 Asp. Tox. 1; H304	>= 5 - < 15
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	>= 2.5 - < 10
Hydrocarbons, C9, Aromatics	64742-95-6 918-668-5 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 STOT SE 3; H335	>= 2.5 - < 10

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

		Asp. Tox. 1; H304 Aquatic Chronic 2; H411	
ethylbenzene	100-41-4 202-849-4 601-023-00-4 01-2119489370-35	Flam. Liq. 2; H225 Acute Tox. 4; H332 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	$\geq 2.5 - < 10$
2-butoxyethyl acetate	112-07-2 203-933-3 607-038-00-2 01-2119475112-47	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312	$\geq 1 - < 5$
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Not Assigned 915-687-0 01-2119491304-40	Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	$\geq 0.1 - < 0.5$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
Move out of dangerous area.
Take off contaminated clothing and shoes immediately.
Do not leave the victim unattended.
Symptoms of poisoning may appear several hours later.
Show this safety data sheet to the doctor in attendance.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
- If inhaled : Move to fresh air.
Keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.
Call a physician immediately.
- In case of skin contact : Wash off immediately with soap and plenty of water.
Call a physician if irritation develops or persists.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Keep eye wide open while rinsing.
If easy to do, remove contact lens, if worn.
Consult a physician.
- If swallowed : Do NOT induce vomiting.
Call a physician immediately.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

Hazchem: •3Y

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO₂)
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 : Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

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

5.3 Advice for firefighters

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

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Use water spray to cool unopened containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

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.
Ensure adequate ventilation, especially in confined areas.
Remove all sources of ignition.
Do not smoke.
Avoid contact with skin, eyes and clothing.
In the case of vapour formation use a respirator with an approved filter.

6.2 Environmental precautions

Environmental precautions : Prevent spreading over a wide area (e.g. by containment or oil barriers).
Do not flush into surface water or sanitary sewer system.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.
Do not flush with water.

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

Advice on safe handling : Keep container closed when not in use.
Provide sufficient air exchange and/or exhaust in work rooms.
Wear personal protective equipment.

Advice on protection against fire and explosion : Vapours may form explosive mixtures with air.
Keep away from open flames, hot surfaces and sources of ignition.
Do not smoke.
Take measures to prevent the build up of electrostatic charge.
Use explosion-proof equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

Further information on storage conditions : Keep away from heat and sources of ignition.
Protect from moisture.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

Keep away from direct sunlight.

Advice on common storage : Keep away from food and drink.
Incompatible with oxidizing agents.
Incompatible with strong acids and bases.

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
n-butyl acetate	123-86-4	TWA	150 ppm 724 mg/m ³	GB EH40
		STEL	200 ppm 966 mg/m ³	GB EH40
xylene	1330-20-7	STEL	100 ppm 441 mg/m ³	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		TWA	50 ppm 220 mg/m ³	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		TWA	50 ppm 221 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 442 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
2-methoxy-1-methylethyl acetate	108-65-6	STEL	100 ppm 550 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	50 ppm 275 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	50 ppm 274 mg/m ³	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 548 mg/m ³	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
ethylbenzene	100-41-4	TWA	100 ppm	2000/39/EC

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version
1.0

GB/EN

Revision Date:
19.08.2019

Date of last issue: -
Date of first issue: 19.08.2019

			442 mg/m ³	
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	200 ppm 884 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	100 ppm 441 mg/m ³	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	125 ppm 552 mg/m ³	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
2-butoxyethyl acetate	112-07-2	TWA	20 ppm 133 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	50 ppm 333 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	20 ppm	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	50 ppm	GB EH40
Further information	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
xylene	1330-20-7	methyl hippuric acid: 650 Millimoles per mole Creatinine (Urine)	After shift	GB EH40 BAT

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

Substance name	End Use	Exposure routes	Potential health effects	Value
n-butyl acetate	Workers	Inhalation	Long-term systemic effects	300 mg/m ³
	Workers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	35.7 mg/m ³
	Consumers	Dermal	Long-term systemic effects	6 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	2 mg/kg bw/day
	xylene	Workers	Inhalation	Acute systemic effects
Workers		Inhalation	Acute local effects	289 mg/m ³
Workers		Skin contact	Long-term systemic effects	180 mg/kg
Workers		Inhalation	Long-term systemic	77 mg/m ³

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version
1.0

GB/EN

Revision Date:
19.08.2019

Date of last issue: -
Date of first issue: 19.08.2019

			effects	
	Consumers	Inhalation	Acute systemic effects	174 mg/m ³
	Consumers	Inhalation	Acute local effects	174 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	108 mg/kg
	Consumers	Inhalation	Long-term systemic effects	14.8 mg/m ³
2-methoxy-1-methylethyl acetate	Workers	Inhalation	Long-term systemic effects	275 mg/m ³
	Workers	Inhalation	Acute local effects	550 mg/m ³
	Workers	Skin contact	Long-term systemic effects	796 mg/kg
	Consumers	Inhalation	Long-term systemic effects, Long-term local effects	33 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	320 mg/kg
	Consumers	Oral	Long-term systemic effects	36 mg/kg
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Workers	Inhalation	Long-term systemic effects	0.68 mg/m ³
	Workers	Dermal	Long-term systemic effects	0.5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.17 mg/m ³
	Consumers	Dermal	Long-term systemic effects	0.25 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0.05 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
n-butyl acetate	Fresh water	0.18 mg/l
	Marine water	0.018 mg/l
	Fresh water sediment	0.981 mg/kg dry weight (d.w.)
	Marine sediment	0.098 mg/kg dry weight (d.w.)
	Sewage treatment plant	35.6 mg/l
	Soil	0.09 mg/kg dry weight (d.w.)
xylene	Fresh water	0.327 mg/l
	Marine water	0.327 mg/l
	Fresh water sediment	12.46 mg/l
	Marine sediment	12.46 mg/l
	Soil	2.31 mg/l
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

	Marine water	0.064 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	3.29 mg/kg
	Marine sediment	0.329 mg/kg
	Soil	0.29 mg/kg
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Fresh water	0.002 mg/l
	Fresh water sediment	1.05 mg/kg dry weight (d.w.)
	Marine sediment	0.11 mg/kg dry weight (d.w.)
	Soil	0.21 mg/kg dry weight (d.w.)

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : butyl-rubber

Material : Fluorinated rubber

Material : PVA

Material : Nitrile rubber

Break through time : > 480 min

Glove thickness : \geq 0.7 mm

Directive : DIN EN 374

Protective index : Class 6

Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.
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.
Preventive skin protection

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

- or heat-resistant synthetic fibres.
Long sleeved clothing
- Respiratory protection : Apply technical measures to comply with the occupational exposure limits.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
- Filter type : Combined particulates and organic vapour type (A-P)
- Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.
Avoid contact with the skin and the eyes.
Use only with adequate ventilation.

Environmental exposure controls

- Soil : Avoid subsoil penetration.
-

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : colourless
- Odour : characteristic
- Odour Threshold : not determined
- pH : Not applicable
- Melting point/range : not determined
- Boiling point/boiling range : 124 °C
- Flash point : > 23 °C
- Upper explosion limit / Upper flammability limit : Upper explosion limit
15 %(V)
- Lower explosion limit / Lower flammability limit : Lower explosion limit
0.7 %(V)
- Vapour pressure : 10.7 hPa (20 °C)
- Density : 0.97 - 0.99 g/cm³ (20 °C)
- Solubility(ies)
Water solubility : immiscible
- Partition coefficient: n-octanol/water : not determined

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version	Revision Date:	Date of last issue: -
1.0 GB/EN	19.08.2019	Date of first issue: 19.08.2019

Ignition temperature	:	not determined
Viscosity	:	
Viscosity, dynamic	:	127 mPa.s (20 °C)
Viscosity, kinematic	:	not determined

9.2 Other information

No data available

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	:	Incompatible with strong acids and bases. Reaction with strong oxidizing agents.
---------------------	---	---

10.4 Conditions to avoid

Conditions to avoid	:	Heat, flames and sparks.
---------------------	---	--------------------------

10.5 Incompatible materials

Materials to avoid	:	Strong acids and strong bases Strong oxidizing agents
--------------------	---	--

10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Product:

Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

Components:

n-butyl acetate:

Acute oral toxicity : LD50 (Rat): 10,760 mg/kg

xylene:

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 11 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Expert judgement

LC50 (Rat): 21.7 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg
Method: Expert judgement

LD50 (Rabbit): > 1,700 mg/kg

2-methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 6,190 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat): > 1883 ppm
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
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

Hydrocarbons, C9, Aromatics:

Acute oral toxicity : LD50 Oral (Rat, female): ca. 3,492 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 6.193 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): > 3,160 mg/kg
Method: OECD Test Guideline 402

ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3,500 mg/kg

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

2-butoxyethyl acetate:

- Acute oral toxicity : LD50 Oral (Rat): 1,880 mg/kg
Method: OECD Test Guideline 401
- Acute inhalation toxicity : LC0 (Rat): > 400 ppm
Exposure time: 4 h
Test atmosphere: vapour
- Acute dermal toxicity : LD50 Dermal (Rabbit): ca. 1,500 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Components:

xylene:

Result : Skin irritation

Hydrocarbons, C9, Aromatics:

Result : Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

xylene:

Result : Moderate eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Components:

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Assessment : The product is a skin sensitiser, sub-category 1A.

Germ cell mutagenicity

Not classified based on available information.

Components:

Hydrocarbons, C9, Aromatics:

Germ cell mutagenicity- Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

Carcinogenicity

Not classified based on available information.

Components:

Hydrocarbons, C9, Aromatics:

Carcinogenicity - Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

Components:

xylene:

Assessment : May cause respiratory irritation.

2-methoxy-1-methylethyl acetate:

Exposure routes : Oral

Target Organs : Central nervous system

Assessment : May cause drowsiness or dizziness.

Hydrocarbons, C9, Aromatics:

Assessment : May cause respiratory irritation., May cause drowsiness or dizziness.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Components:

xylene:

Target Organs : Central nervous system, Liver, Kidney

Assessment : May cause damage to organs through prolonged or repeated exposure.

ethylbenzene:

Target Organs : hearing organs

Assessment : May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

Components:

xylene:

May be fatal if swallowed and enters airways.

Hydrocarbons, C9, Aromatics:

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Components:

xylene:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 7.6 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.82 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 2.2 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201
- Toxicity to microorganisms : NOEC (Bacteria): 157 mg/l
Exposure time: 3 h
- Toxicity to fish (Chronic toxicity) : NOEC: > 1.3 mg/l
Exposure time: 56 d
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.17 mg/l
Exposure time: 7 d
Species: Daphnia dubia (water flea)
Method: Regulation (EC) No. 440/2008, Annex, C.20

Ecotoxicology Assessment

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

2-methoxy-1-methylethyl acetate:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 100 - 180 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 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 500 mg/l
End point: Immobilization
Exposure time: 48 h
Method: Regulation (EC) No. 440/2008, Annex, C.2
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l
End point: Growth rate
Exposure time: 96 h
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: \geq 100 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
- Hydrocarbons, C9, Aromatics:**
- Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3.2 mg/l
End point: Immobilization
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae : NOELR (Pseudokirchneriella subcapitata (green algae)): 1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOELR: 1.228 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 2.144 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
- ethylbenzene:**
- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.8 mg/l
Exposure time: 48 h
- Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): 4.6

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1 mg/l
Species: Ceriodaphnia dubia (water flea)

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Toxicity to fish : LC50 (Fish): 0.97 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 20 mg/l
Exposure time: 24 h

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 1.68 mg/l
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 : > 100 mg/l
Exposure time: 3 h

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Components:

xylene:

Biodegradability : Biodegradation: 87.8 %
Exposure time: 28 d
Method: OECD Test Guideline 301

2-methoxy-1-methylethyl acetate:

Biodegradability : Biodegradation: 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Hydrocarbons, C9, Aromatics:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 78 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

ethylbenzene:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version	Revision Date:	Date of last issue: -
1.0 GB/EN	19.08.2019	Date of first issue: 19.08.2019

Biodegradability : Result: rapidly degradable
Biodegradation: 79 %
Exposure time: 10 d

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Biodegradability : Biodegradation: 38 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

12.3 Bioaccumulative potential

Components:

xylene:

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): 25.9

Partition coefficient: n-octanol/water : log Pow: 3.16 (20 °C)

2-methoxy-1-methylethyl acetate:

Partition coefficient: n-octanol/water : log Pow: 1.2 (20 °C)
pH: 6.8

ethylbenzene:

Partition coefficient: n-octanol/water : log Pow: 3.6 (20 °C)

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Bioaccumulation : Bioconcentration factor (BCF): < 9.7

12.4 Mobility in soil

Components:

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Distribution among environmental compartments : log Koc: 5.31

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..

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version	Revision Date:	Date of last issue: -
1.0 GB/EN	19.08.2019	Date of first issue: 19.08.2019

12.6 Other adverse effects

Product:

Additional ecological information : No data available

Components:

xylene:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : Do not dispose of with domestic refuse.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Dispose of in accordance with local regulations.
Send to a licensed waste management company.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Store containers and offer for recycling of material when in accordance with the local regulations.
Packaging that is not properly emptied must be disposed of as the unused product.
Dispose of in accordance with local regulations.
- Waste Code : The following Waste Codes are only suggestions:
08 01 11, waste paint and varnish containing organic solvents or other hazardous substances
-

SECTION 14: Transport information

14.1 UN number

- ADN : UN 1263
ADR : UN 1263
RID : UN 1263
IMDG : UN 1263
IATA : UN 1263

14.2 UN proper shipping name

- ADN : PAINT
ADR : PAINT
RID : PAINT

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version 1.0 GB/EN Revision Date: 19.08.2019 Date of last issue: -
Date of first issue: 19.08.2019

IMDG : PAINT

IATA : Paint

14.3 Transport hazard class(es)

ADN : 3

ADR : 3

RID : 3

IMDG : 3

IATA : 3

14.4 Packing group

ADN

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

ADR

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

RID

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

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 : Class 3 - Flammable liquids

IATA (Passenger)

Packing instruction (passenger aircraft) : 355
Packing instruction (LQ) : Y344
Packing group : III
Labels : Class 3 - Flammable liquids

14.5 Environmental hazards

ADN

Environmentally hazardous : no

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version	Revision Date:	Date of last issue: -
1.0	19.08.2019	Date of first issue: 19.08.2019

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

Hazchem: •3Y

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

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 - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

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 (EC) No 850/2004 on persistent organic pollutants : Not applicable

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

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

34 Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams), (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environ-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version	Revision Date:	Date of last issue: -
1.0 GB/EN	19.08.2019	Date of first issue: 19.08.2019

mental hazards as the products referred to in points (a) to (d)

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

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.

SECTION 16: Other information

Full text of H-Statements

H225	: Highly flammable liquid and vapour.
H226	: Flammable liquid and vapour.
H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H312	: Harmful in contact with skin.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H373	: May cause damage to organs through prolonged or repeated exposure.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Asp. Tox.	: Aspiration hazard
Eye Irrit.	: Eye irritation
Flam. Liq.	: Flammable liquids
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
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
GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 BAT	: UK. Biological monitoring guidance values
2000/39/EC / TWA	: Limit Value - eight hours

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version	Revision Date:	Date of last issue: -
1.0 GB/EN	19.08.2019	Date of first issue: 19.08.2019

2000/39/EC / STEL	:	Short term exposure limit
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance 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:

Flam. Liq. 3	H226
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
STOT SE 3	H336
STOT SE 3	H335
STOT RE 2	H373
Aquatic Chronic 3	H412

Classification procedure:

Based on product data or assessment
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

VOSSCHEMIE

Carsystem 2K Clear VOC HS/SR

Version		Revision Date:	Date of last issue: -
1.0	GB/EN	19.08.2019	Date of first issue: 19.08.2019

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.