

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

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

· **1.1 Product identifier**

· **Trade name:** CARSYSTEM 2K CLEAR VOC HS/SR

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

The product is intended for professional use.

· **Application of the substance / the mixture** Coating material

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Vosschemie GmbH

Esinger Steinweg 50

D-25436 Uetersen

Phone: +49 (0)4122 717 0; Fax: +49 (0)4122 717158; info@vosschemie.de

· **Further information obtainable from:**

Abteilung Labor / +49 (0)4122 717 0

s.schaller@vosschemie.de

· **1.4 Emergency telephone number:**

Giftinformationszentrum (GIZ)-Nord, Goettingen, Deutschland

Phone: +49 (0)551 19240

· **1.5 Distributed By:**

Sydney Automotive Paint and Equipment

Unit A3, 366 Edgar Street

Condell Park

NSW 2200

Australia

Tel: +61 2 9772 9000

Email: reception@sape.com.au

Emergency telephone: AU Poison Information Centre 13 11 26

General medical information: +61 2 9772 9000 (Mon to Fri, 08:00-16:00 AEST)

Transport information: +61 2 9772 9000 (Mon to Fri, 08:00-16:00 AEST)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3

H226

Flammable liquid and vapour.



GHS08 health hazard

STOT RE 2

H373

May cause damage to organs through prolonged or repeated exposure.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 1)



GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02

GHS07

GHS08

· **Signal word** Warning

· **Hazard-determining components of labelling:**

xylene, mixture of isomers

n-butyl acetate

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

· **Hazard statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. 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**

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

P260 Do not breathe mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

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

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

GB

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	10-<20%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	xylene, mixture of isomers ⚠ Flam. Liq. 3, H226; ⚠ STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	5-<15%
EC number: 918-668-5 Reg.nr.: 01-2119455851-35	Hydrocarbons, C9, aromatics ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H335-H336	3-<10%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226	3-<10%
CAS: 100-41-4 EINECS: 202-849-4 Reg.nr.: 01-2119489370-35	ethylbenzene ⚠ Flam. Liq. 2, H225; ⚠ STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Acute Tox. 4, H332; Aquatic Chronic 3, H412	3-<10%
CAS: 112-07-2 EINECS: 203-933-3 Reg.nr.: 01-2119475112-47	2-butoxyethyl acetate ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332	1-<5%
EC number: 915-687-0 Reg.nr.: 01-2119491304-40	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sens. 1A, H317	01-<1%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

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

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing: Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 3)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media** **Hazchem: •3Y**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
During heating or in case of fire poisonous gases are produced.
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Remove undamaged containers from the danger zone.
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Mount respiratory protective device.
Ensure adequate ventilation
Keep away from ignition sources.
Avoid contact with the eyes and skin.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Do not flush with water or aqueous cleansing agents
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 4)

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Information about fire - and explosion protection:

Vapours of the product are heavier than air and may accumulate on the ground, in mines, drains or cellars with higher concentration.

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

Adhere to the provisions of the Law on Water Protection.

· Information about storage in one common storage facility:

Pls. refer to section 10

Store away from oxidising agents.

Keep away from foodstuffs, beverages and feed.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

Protect from heat and direct sunlight.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

123-86-4 n-butyl acetate

WEL (Great Britain)	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
---------------------	---

1330-20-7 xylene, mixture of isomers

WEL (Great Britain)	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
---------------------	--

IOELV (EU)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
------------	--

108-65-6 2-methoxy-1-methylethyl acetate

WEL (Great Britain)	Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm Sk
---------------------	--

IOELV (EU)	Short-term value: 550 mg/m ³ , 100 ppm Long-term value: 275 mg/m ³ , 50 ppm Skin
------------	--

(Contd. on page 6)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 5)

112-07-2 2-butoxyethyl acetate

WEL (Great Britain)	Short-term value: 332 mg/m ³ , 50 ppm Long-term value: 133 mg/m ³ , 20 ppm Sk
IOELV (EU)	Short-term value: 333 mg/m ³ , 50 ppm Long-term value: 133 mg/m ³ , 20 ppm Skin

· DNELs

123-86-4 n-butyl acetate

Oral	Long-term exposure - systemic effects	3.4 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	3.4 mg/kg bw/day (general population) 7 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	102.34 mg/m ³ (general population) 480 mg/m ³ (worker)
	Acute/short-term exposure - systemic effects	859.7 mg/m ³ (general population) 960 mg/m ³ (worker)
	Acute/short-term exposure - local effects	859.7 mg/m ³ (general population) 960 mg/m ³ (worker)
	Long-term exposure - local effects	102.34 mg/m ³ (general population) 480 mg/m ³ (worker)

1330-20-7 xylene, mixture of isomers

Oral	Long-term exposure - systemic effects	1.6 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	108 mg/kg bw/day (general population) 180 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	14.8 mg/m ³ (general population) 77 mg/m ³ (worker)
	Acute/short-term exposure - systemic effects	174 mg/m ³ (general population) 289 mg/m ³ (worker)
	Acute/short-term exposure - local effects	174 mg/m ³ (general population) 289 mg/m ³ (worker)

Hydrocarbons, C9, aromatics

Oral	Long-term exposure - systemic effects	11 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	11 mg/kg bw/day (general population) 25 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	32 mg/m ³ (general population) 150 mg/m ³ (worker)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	Long-term exposure - systemic effects	1.67 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	54.8 mg/kg bw/day (general population) 153.5 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	33 mg/m ³ (general population) 275 mg/m ³ (worker)

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 6)

112-07-2 2-butoxyethyl acetate

Dermal	Long-term exposure - systemic effects	102 mg/kg bw/day (worker)
	Acute/short-term exposure - systemic effects	102 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	133 mg/m ³ (worker)
	Acute/short-term exposure - systemic effects	775 mg/m ³ (worker)
	Acute/short-term exposure - local effects	333 mg/m ³ (worker)

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

Oral	Acute/short-term exposure - systemic effects	1.25 mg/kg bw/day (general population)
	Long-term exposure - systemic effects	1.25 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	1.25 mg/kg bw/day (general population)
	Acute/short-term exposure - systemic effects	2.5 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	1.25 mg/kg bw/day (general population)
	Acute/short-term exposure - systemic effects	2.5 mg/kg bw/day (worker)
	Acute/short-term exposure - systemic effects	0.58 mg/m ³ (general population)
		2.35 mg/m ³ (worker)
		0.58 mg/m ³ (general population)
		2.35 mg/m ³ (worker)

· PNECs

123-86-4 n-butyl acetate

PNEC aqua	0.18 mg/l (freshwater)
	18 mg/l (marine water)
	0.36 mg/l (intermittent releases)
PNEC sediment	981 mg/kg (freshwater)
	0.0981 mg/kg (marine water)
PNEC STP	35.6 mg/l
PNEC soil	0.0903 mg/kg (soil dw)

1330-20-7 xylene, mixture of isomers

PNEC aqua	327 mg/l (freshwater)
	327 mg/l (marine water)
	327 mg/l (intermittent releases)
PNEC sediment	12.46 mg/kg (freshwater)
	12.46 mg/kg (marine water)
PNEC STP	6.58 mg/l

108-65-6 2-methoxy-1-methylethyl acetate

PNEC aqua	635 mg/l (freshwater)
	0.0635 mg/l (marine water)
	6.35 mg/l (intermittent releases)
PNEC sediment	3.29 mg/kg (freshwater)
	329 mg/kg (marine water)
PNEC STP	100 mg/l
PNEC soil	0.29 mg/kg (soil dw)

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 7)

112-07-2 2-butoxyethyl acetate

<i>PNEC aqua</i>	304 mg/l (freshwater) 0.0304 mg/l (marine water) 0.56 mg/l (intermittent releases)
<i>PNEC sediment</i>	2.03 mg/kg (freshwater) 203 mg/kg (marine water)
<i>PNEC STP</i>	90 mg/l
<i>PNEC soil</i>	0.68 mg/kg (soil dw)

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

<i>PNEC aqua</i>	0.0022 mg/l (freshwater) 0.00022 mg/l (marine water) 9 mg/l (intermittent releases)
<i>PNEC sediment</i>	1.05 mg/kg (freshwater) 0.11 mg/kg (marine water)
<i>PNEC STP</i>	1 mg/l
<i>PNEC soil</i>	0.21 mg/kg (soil dw)

· Ingredients with biological limit values:**1330-20-7 xylene, mixture of isomers**

<i>BMGV (Great Britain)</i>	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
-----------------------------	--

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Do not eat, drink, smoke or sniff while working.
- Do not inhale gases / fumes / aerosols.
- Wash hands before breaks and at the end of work.
- Immediately remove all soiled and contaminated clothing
- Wash contaminated clothing before reuse.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.
- Use skin protection cream for skin protection.

· Respiratory protection:

- Adhere to the workplace limit values and / or other threshold values.
- Use respiratory protective device against the effects of fumes/dust/aerosol.
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Filter A/P2

· Protection of hands:

Protective gloves

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 8)

To avoid skin problems reduce the wearing of gloves to the required minimum.

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

PVA gloves

Recommended thickness of the material: ≥ 0.7 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

Value for the permeation: Level ≤ 6 (≥ 480 min, DIN EN 374-3.)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For special applications, it is recommended to verify the chemical resistance of the above stated protective gloves with the manufacturer.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Colourless

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 124°C

· **Flash point:** $> 23^{\circ}\text{C}$

· **Ignition temperature:** Not determined

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 9)

· Explosion limits:	
Lower:	0.7 Vol %
Upper:	15.0 Vol %
· Vapour pressure at 20°C:	10.7 hPa
· Density at 20°C:	0.97 -0.99 g/cm ³
· Vapour density	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined
· Viscosity:	
Dynamic at 20°C:	127 mPas
Kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No decomposition if used according to specifications.
- **10.2 Chemical stability** No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Fumes can combine with air to form an explosive mixture.
Reacts with alkali, amines and strong acids.
Reacts with oxidising agents.
- **10.4 Conditions to avoid** Protect from heat and direct sunlight.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

123-86-4 n-butyl acetate

Oral	LD50	10,760 mg/kg (rat) (OECD 423)
Dermal	LD 50	>5,000 mg/kg (rabbit)
Inhalative	LC50 /4h	>21 mg/l (rat) (OECD 403, vapour)
	LC 50 / 4h	23.4 mg/l (rat) (OECD 403, aerosol)

1330-20-7 xylene, mixture of isomers

Oral	LD 50	>2,000 mg/kg (rat)
Dermal	LD 50	>1,700 mg/kg (rabbit)
Inhalative	LC 50 / 4h	21.7 mg/l (rat) (Vapour)
	LC50 /4h	5,000 ppm (rat) (Gas)

(Contd. on page 11)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 10)

Hydrocarbons, C9, aromatics

Oral	LD 50	3,492 mg/kg (rat) (OECD 401)
Dermal	LD 50	>3,160 mg/kg (rabbit) (OECD 402)
Inhalative	LC50 /4h	>6,193 mg/m ³ (rat) (OECD Guideline 403, vapour)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD 50	>5,000 mg/kg (rat)
Dermal	LD 50	>5,000 mg/kg (rabbit)
Inhalative	LC50 /4h	35.7 mg/l (rat)

100-41-4 ethylbenzene

Oral	LD50	3,500 mg/kg (rat)
Dermal	LD 50	>5,000 mg/kg (rabbit)
Inhalative	LC50 /4h	17.2 mg/l (rat)

112-07-2 2-butoxyethyl acetate

Oral	LD50	2,400 mg/kg (rat)
Dermal	LD50	1,580 mg/kg (rabbit)
Inhalative	LC50 /6h	>3.06 mg/l (rat) (saturated vapour concentration)

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

Oral	LD50	3,230 mg/kg (rat)
Dermal	LD50	>3,170 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Subacute to chronic toxicity:** No further relevant information available.
- **Additional toxicological information:** Repeated exposure may cause skin dryness or cracking.
- **Sensitisation** Sensitisation possible through skin contact.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
No further relevant information available.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause respiratory irritation. May cause drowsiness or dizziness.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:****123-86-4 n-butyl acetate**

EC50	356 mg/l (bacteria) (Tetrahymena, 40h)
------	--

(Contd. on page 12)

GB

Safety data sheet
 according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 11)

EC50/48h	44 mg/l (<i>daphnia magna</i>)
EC50/72h	674.7 mg/l (<i>scenedesmus subspicatus</i>) 647.7 mg/l (<i>desmodesmus subspicatus</i>)
LC50/96h	18 mg/l (<i>pimephales promelas</i>) (OECD 203)
LC50	64 mg/l (<i>danio rerio</i>) (48h)
NOEC	200 mg/l (<i>desmodesmus subspicatus</i>)
1330-20-7 xylene, mixture of isomers	
EC50	>175 mg/l (<i>activated slugde</i>)
EC50/48h	3.82 mg/l (<i>daphnia magna</i>)
EC50/72h	4.7 mg/l (<i>Pseudokirchneriella subcapitata</i>)
LC50/96h	7.6 mg/l (<i>oncorhynchus mykiss</i>)
NOEC	>1.3 mg/l (<i>oncorhynchus mykiss</i>) (56 d)
Hydrocarbons, C9, aromatics	
EC50/48h	4.5 mg/l (<i>daphnia magna</i>)
EL50/48h	3.2 mg/l (<i>daphnia</i>) (OECD Guideline 202, mobility)
EL50/72h	2.9 mg/l (<i>Pseudokirchneriella subcapitata</i>) (OECD Guideline 201)
LL50/96h	9.2 mg/l (<i>oncorhynchus aguabonita</i>) (OECD Guideline 203)
NOEC	8.2 mg/l (<i>pimephales promelas</i>) 0.5 mg/l (<i>Pseudokirchneriella subcapitata</i>) (72h) 0.5 mg/l (<i>daphnia magna</i>) (48h) 2.6 mg/l (<i>pimephales promelas</i>) (14d)
NOELR (aqua chron.)	2,144 mg/l (<i>daphnia magna</i>) (21d, calculated by a computer model)
108-65-6 2-methoxy-1-methylethyl acetate	
EC50/48h	>500 mg/l (<i>daphnia magna</i>) (67/548/EWG Appendix V, C.2.)
EC50/72h	>1,000 mg/l (<i>Pseudokirchneriella subcapitata</i>) (OECD- 201)
LC50/96h	130 mg/l (<i>oncorhynchus mykiss</i>) (OECD- 203)
NOEC	≥100 mg/l (<i>daphnia magna</i>) (21d, OECD 211) 47.5 mg/l (<i>Oryzias latipes</i>) (14d, OECD 204)
100-41-4 ethylbenzene	
EC50/48h	2.4 mg/l (<i>daphnia magna</i>) >5.2 mg/l (<i>americamysis bahia</i>)
EC50/72h	4.6 mg/l (<i>Pseudokirchneriella subcapitata</i>)
LC50/96h	4.2 mg/l (<i>oncorhynchus mykiss</i>)
112-07-2 2-butoxyethyl acetate	
EC50/48h	67.5 mg/l (<i>daphnia magna</i>) (ISO 6341 15)
EC50/72h	1,570 mg/l (<i>Pseudokirchneriella subcapitata</i>) (ISO 8692)
EC50/0.5h	22 mg/l (<i>activated slugde</i>) (OECD 209)
LC50/96h	28 mg/l (<i>oncorhynchus mykiss</i>) (OECD 203)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
EC50	20 mg/l (<i>daphnia magna</i>) (OECD 202, 24h)
EC50/72h (static)	1.68 mg/l (<i>desmodesmus subspicatus</i>) (OECD 201)

(Contd. on page 13)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 12)

EC50/3h	>100 mg/l (activated slugde) (OECD 209, aerob)
LC50/96h	0.9 mg/l (danio rerio) (OECD 203, semistatic) 0.97 mg/l (Lepomis macrochirus) (OECD 203) 7.9 mg/l (oncorhynchus mykiss) (OECD 203)
NOEC (aqua chron.)	1 mg/l (daphnia magna) (OECD 211, semistatic, 21d)
· 12.2 Persistence and degradability	
123-86-4 n-butyl acetate	
Biodegradation	83 % (OECD 301 D 28d)
1330-20-7 xylene, mixture of isomers	
Biodegradation	87.8 % (28d)
Hydrocarbons, C9, aromatics	
Biodegradation	>70 % (OECD Guideline 301 F, 28d)
108-65-6 2-methoxy-1-methylethyl acetate	
BSB	>90 % (activated slugde) (28d, OECD 301 F)
Biodegradation	100 % (OECD 302 B, 8d)
100-41-4 ethylbenzene	
Biodegradation	>70 % (28 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	
Biodegradation	38 % (OECD 301F)
· 12.3 Bioaccumulative potential	
123-86-4 n-butyl acetate	
log Pow	2.3 (OECD 117)
BCF	15.3
1330-20-7 xylene, mixture of isomers	
log Pow	>3
BCF	6–23.4
108-65-6 2-methoxy-1-methylethyl acetate	
log Pow	1.2 (OECD Guideline 117 [20°C; pH 6,8])
100-41-4 ethylbenzene	
log Pow	3.1
112-07-2 2-butoxyethyl acetate	
log Kow	1.51
BCF	1.51
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
log Kow	2.37–2.77 (OECD 107)
BCF	<9.7
· Behaviour in environmental systems:	
· 12.4 Mobility in soil	
123-86-4 n-butyl acetate	
log Koc	1.27

(Contd. on page 14)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 13)

108-65-6 2-methoxy-1-methylethyl acetate

Koc 1.7

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

log Koc 5.31

Koc 204,400

- **Ecotoxicological effects:**
- **Remark:** Harmful to aquatic organisms
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.
- **Waste disposal key:**
The waste codes given above are to be considered recommendations; because of regional and industrial sector specific features, application of different waste codes is possible.

· European waste catalogue

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
-----------	---

- **Uncleaned packaging:**
- **Recommendation:**
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---------------------------------------|------------|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN1263 |
| · 14.2 UN proper shipping name | |
| · ADR | 1263 PAINT |
| · IMDG, IATA | PAINT |

(Contd. on page 15)

-GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 14)

- 14.3 Transport hazard class(es) **Hazchem: •3Y**
- ADR, IMDG, IATA



- Class 3 Flammable liquids.
- Label 3

- 14.4 Packing group III
- ADR, IMDG, IATA

- 14.5 Environmental hazards: Not applicable.

- 14.6 Special precautions for user Warning: Flammable liquids.
- Danger code (Kemler): 30
- EMS Number: F-E,S-E

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

· Transport/Additional information:

- ADR
- Limited quantities (LQ) 5L
- Excepted quantities (EQ) Code: E1
- Maximum net quantity per inner packaging: 30 ml
- Maximum net quantity per outer packaging: 1000 ml
- Tunnel restriction code D/E

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- European regulations
- Directive 2004/42/EC 2004/42/IIB (e) (840) <840
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category P5c FLAMMABLE LIQUIDS
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:
- Information about limitation of use:
 - Employment restrictions concerning juveniles must be observed.
 - Employment restrictions concerning pregnant and lactating women must be observed.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(Contd. on page 16)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.08.2017

V - 4

Revision: 22.08.2017

Trade name: CARSYSTEM 2K CLEAR VOC HS/SR

(Contd. of page 15)

· **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- 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.

· **Department issuing SDS:** Abteilung Labor

· **Contact:** Frau S. Schaller

· **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - ICAO: International Civil Aviation Organisation
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - DNEL: Derived No-Effect Level (REACH)
 - PNEC: Predicted No-Effect Concentration (REACH)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Flam. Liq. 2: Flammable liquids – Category 2
 - Flam. Liq. 3: Flammable liquids – Category 3
 - Acute Tox. 4: Acute toxicity – Category 4
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 - Skin Sens. 1: Skin sensitisation – Category 1
 - Skin Sens. 1A: Skin sensitisation – Category 1A
 - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 - Asp. Tox. 1: Aspiration hazard – Category 1
 - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
 - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
- *** Data compared to the previous version altered.**

GB