

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version		Revision Date:	Date of last issue: 02.08.2022
1.1	DE / EN	20.09.2023	Date of first issue: 02.08.2022

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

#### 1.1 Product identifier

Trade name : Carsystem KS-250  
Product code : 126.061

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

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

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

Company : JASA AG  
Müslistrasse 43  
8957 Spreitenbach  
Schweiz  
info@jasa-ag.ch, www.jasa-ag.ch  
Telephone : +41 (0)44 431 60 70  
Telefax : +41 (0)44 432 63 17  
**Responsible Department** : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

#### 1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version  
1.1

DE / EN

Revision Date:  
20.09.2023

Date of last issue: 02.08.2022  
Date of first issue: 02.08.2022

### 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.

Specific target organ toxicity - single exposure, Category 3, Central nervous system

H336: May cause drowsiness or dizziness.

Long-term (chronic) aquatic hazard, Category 2

H411: Toxic to aquatic life with long lasting effects.

#### 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.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

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.  
P260 Do not breathe spray.

##### Storage:

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version  
1.1

DE / EN

Revision Date:  
20.09.2023

Date of last issue: 02.08.2022  
Date of first issue: 02.08.2022

### 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:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

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

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

### Additional Labeling

EUH208 Contains Sulfonic acids, petroleum, calcium salts. May produce an allergic reaction.

### 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)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	Not Assigned 920-750-0 01-2119473851-33	Flam. Liq. 2; H225 STOT SE 3; H336 (Central nervous system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 25 - < 50
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2%	Not Assigned 919-857-5	Flam. Liq. 3; H226 STOT SE 3; H336	>= 12,5 - < 20

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version  
1.1

DE / EN

Revision Date:  
20.09.2023

Date of last issue: 02.08.2022  
Date of first issue: 02.08.2022

aromatics	01-2119463258-33	(Central nervous system) Asp. Tox. 1; H304 EUH066	
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not Assigned 927-241-2 01-2119471843-32	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) Asp. Tox. 1; H304 Aquatic Chronic 3; H412 EUH066	>= 5 - < 10
Sulfonic acids, petroleum, calcium salts	61789-86-4 263-093-9 01-2119488992-18	Skin Sens. 1B; H317 <hr/> specific concentration limit Skin Sens. 1B 10 %	>= 2,5 - < 5

For explanation of abbreviations see section 16.

## 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.  
If eye irritation persists, consult a specialist.
- If swallowed : Swallowing is not regarded as a possible method for exposure.  
Immediately give large quantities of water to drink.  
Get medical attention immediately.

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

- Risks : May cause drowsiness or dizziness.  
Repeated exposure may cause skin dryness or cracking.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

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

Treatment : Treat symptomatically.

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## 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.

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.

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## 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

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

respective authorities.

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

Methods for cleaning up : Ventilate the area.  
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.

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## 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.

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.

### 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. Solvent vapors are heavier than air and may spread along floors. 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

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis
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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version  
1.1

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Revision Date:  
20.09.2023

Date of last issue: 02.08.2022  
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		of exposure)		
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not Assigned	AGW	300 mg/m <sup>3</sup>	DE TRGS 900
	Peak-limit category: 2;(II)			
	Further information: Group exposure limit for hydrocarbon solvent mixtures			
propane	74-98-6	AGW	1.000 ppm 1.800 mg/m <sup>3</sup>	DE TRGS 900
	Peak-limit category: 4;(II)			
butane (containing < 0,1 % butadiene (203-450-8))	106-97-8	AGW	1.000 ppm 2.400 mg/m <sup>3</sup>	DE TRGS 900
	Peak-limit category: 4;(II)			
isobutane (< 0,1% 1,3-butadiene (203-450-8))	75-28-5	AGW	1.000 ppm 2.400 mg/m <sup>3</sup>	DE TRGS 900
	Peak-limit category: 4;(II)			
Sulfonic acids, petroleum, calcium salts	61789-86-4	AGW (Alveolate fraction)	5 mg/m <sup>3</sup>	DE TRGS 900
	Peak-limit category: 4;(II)			

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	Workers	Inhalation	Long-term systemic effects	2035 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	773 mg/kg
	Consumers	Inhalation	Long-term systemic effects	608 mg/m <sup>3</sup>
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Consumers	Skin contact, Oral	Long-term systemic effects	699 mg/kg
	Workers	Inhalation	Long-term systemic effects	871 mg/m <sup>3</sup>
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Consumers	Inhalation	Long-term systemic effects	185 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term systemic effects	871 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	77 mg/kg
Sulfonic acids, petro-	Consumers	Inhalation	Long-term systemic effects	185 mg/m <sup>3</sup>
	Consumers	Skin contact, Oral	Long-term systemic effects	46 mg/kg
	Workers	Inhalation	Long-term systemic effects	11,75 mg/m <sup>3</sup>

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version  
1.1

DE / EN

Revision Date:  
20.09.2023

Date of last issue: 02.08.2022  
Date of first issue: 02.08.2022

Substance name	Exposure scenario	Route of exposure	Effects	Value
leum, calcium salts	Workers	Skin contact	Long-term systemic effects	3,33 mg/kg
	Workers	Skin contact	Long-term local effects	1,03 mg/kg
	Consumers	Inhalation	Long-term systemic effects	2,9 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	1,667 mg/kg
	Consumers	Skin contact	Long-term local effects	0,513 mg/kg
	Consumers	Oral	Long-term systemic effects	0,833 mg/kg

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

Substance name	Environmental Compartment	Value
Sulfonic acids, petroleum, calcium salts	Fresh water	1 mg/l
	Sea water	1 mg/l
	Sewage treatment plant (STP)	1000 mg/l
	Fresh water sediment	226000000 mg/kg
	Sea sediment	226000000 mg/kg
	Soil	271000000 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 : butyl-rubber  
Break through time : > 480 min  
Glove thickness :  $\geq$  0,4 mm  
Directive : DIN EN 374  
Protective index : Class 6

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.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

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.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : aerosol

Color : off-white

Odor : solvent

Melting point/freezing point : not determined

Initial boiling point and boiling range : Not applicable

Upper explosion limit / Upper flammability limit : 10,9 %(V)

Lower explosion limit / Lower flammability limit : 0,6 %(V)

Flash point : Not applicable

Autoignition temperature : > 200 °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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

Vapor pressure : 3.500 hPa (20 °C)

Density : 0,7 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

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## 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

### 10.6 Hazardous decomposition products

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

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## SECTION 11: Toxicological information

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

#### Acute toxicity

Not classified based on available information.

#### Components:

#### Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Acute oral toxicity : LD50 Oral (Rat): > 5.840 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 23,3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: OECD Test Guideline 403

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.800 - 3.100 mg/kg

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

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 9,3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

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

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Acute oral toxicity : LD50 Oral (Rat): > 15.000 mg/kg  
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat): > 4,951 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
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

**Sulfonic acids, petroleum, calcium salts:**

Acute oral toxicity : LD50 Oral (Rat): > 16.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 1,9 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity, The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

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

**Skin corrosion/irritation**

Repeated exposure may cause skin dryness or cracking.

**Components:**

**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

Assessment : Repeated exposure may cause skin dryness or cracking.

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

Assessment : Repeated exposure may cause skin dryness or cracking.

### **Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Result : Repeated exposure may cause skin dryness or cracking.

### **Serious eye damage/eye irritation**

Not classified based on available information.

### **Respiratory or skin sensitization**

#### **Skin sensitization**

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

### **Components:**

#### **Sulfonic acids, petroleum, calcium salts:**

Assessment : The product is a skin sensitizer, sub-category 1B.

### **Germ cell mutagenicity**

Not classified based on available information.

### **Components:**

#### **Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

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

### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

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

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

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

### **Reproductive toxicity**

Not classified based on available information.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version  
1.1

DE / EN

Revision Date:  
20.09.2023

Date of last issue: 02.08.2022  
Date of first issue: 02.08.2022

---

### STOT-single exposure

May cause drowsiness or dizziness.

#### Components:

#### Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

Assessment : May cause drowsiness or dizziness.

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

Assessment : May cause drowsiness or dizziness.

#### Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Assessment : May cause drowsiness or dizziness.

### STOT-repeated exposure

Not classified based on available information.

### Aspiration toxicity

Not classified based on available information.

#### Components:

#### Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

May be fatal if swallowed and enters airways.

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

May be fatal if swallowed and enters airways.

#### Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

May be fatal if swallowed and enters airways.

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

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

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## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

#### Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

- Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 3 - 10 mg/l  
End point: mortality  
Exposure time: 96 h  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 4,6 - 10 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 10 - 30 mg/l  
End point: Growth rate  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOELR: 0,574 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 1 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

### Ecotoxicology Assessment

- Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

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

- Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 1.000 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOELR: 0,131 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 0,23 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

### Ecotoxicology Assessment

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

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

### Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 10 - < 30 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 22 - < 46 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR: 0,182 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 0,317 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

### Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

### Sulfonic acids, petroleum, calcium salts:

Toxicity to fish : LL50 (Cyprinodon variegatus (sheepshead minnow)): > 10.000 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

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

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 72 h

Toxicity to microorganisms : EC50 (Bacteria): > 10.000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

### Ecotoxicology Assessment

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version 1.1 DE / EN Revision Date: 20.09.2023 Date of last issue: 02.08.2022  
Date of first issue: 02.08.2022

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### 12.2 Persistence and degradability

#### Components:

##### **Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics:**

Biodegradability : Biodegradation: 98 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

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

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 80 %  
Exposure time: 28 d

##### **Sulfonic acids, petroleum, calcium salts:**

Biodegradability : Biodegradation: 8 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

### 12.3 Bioaccumulative potential

#### Components:

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

Partition coefficient: n- : log Pow: > 4  
octanol/water

##### **Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics:**

Partition coefficient: n- : Remarks: No data available  
octanol/water

##### **Sulfonic acids, petroleum, calcium salts:**

Partition coefficient: n- : log Pow: 22,12 (25 °C)  
octanol/water

### 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:



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

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

#### **Global warming potential**

Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations Framework Convention on Climate Change (UNFCCC)

#### Components:

##### **propane:**

20-year global warming potential: 0,072  
100-year global warming potential: 0,02  
500-year global warming potential: 0,006  
Atmospheric lifetime: 0,036 yr  
Radiative efficiency: 0 Wm<sup>2</sup>ppb  
Further information: Miscellaneous compounds

##### **butane (containing < 0,1 % butadiene (203-450-8)):**

20-year global warming potential: 0,022  
100-year global warming potential: 0,006  
500-year global warming potential: 0,002  
Atmospheric lifetime: 0,019 yr  
Radiative efficiency: 0 Wm<sup>2</sup>ppb  
Further information: Miscellaneous compounds

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## 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:  
08 01 11, waste paint and varnish containing organic solvents or other hazardous substances  
15 01 10, packaging containing residues of or contaminated by hazardous substances

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADN	: UN 1950
ADR	: UN 1950
RID	: UN 1950
IMDG	: UN 1950
IATA	: UN 1950

#### 14.2 UN proper shipping name

ADN	: AEROSOLS
ADR	: AEROSOLS
RID	: AEROSOLS
IMDG	: AEROSOLS (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine)
IATA	: Aerosols, flammable

#### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADN	: 2	2.1
ADR	: 2	2.1
RID	: 2	2.1
IMDG	: 2.1	
IATA	: 2.1	

#### 14.4 Packing group

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

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

### IATA (Cargo)

Packing instruction (cargo aircraft) : 203  
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

### ADN

Environmentally hazardous : yes

### ADR

Environmentally hazardous : yes

### RID

Environmentally hazardous : yes

### IMDG

Marine pollutant : yes

## 14.6 Special precautions for user

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

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

---

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

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

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

E2 ENVIRONMENTAL HAZARDS

Water hazard class (Germany) : WGK 2 obviously hazardous to water  
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 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.

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## SECTION 16: Other information

### Full text of H-Statements

H225 : Highly flammable liquid and vapor.  
H226 : Flammable liquid and vapor.  
H304 : May be fatal if swallowed and enters airways.  
H317 : May cause an allergic skin reaction.  
H336 : May cause drowsiness or dizziness.  
H411 : Toxic to aquatic life with long lasting effects.  
H412 : Harmful to aquatic life with long lasting effects.  
EUH066 : Repeated exposure may cause skin dryness or cracking.

### Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard  
Asp. Tox. : Aspiration hazard  
Flam. Liq. : Flammable liquids  
Skin Sens. : Skin sensitization

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version	Revision Date:	Date of last issue: 02.08.2022
1.1 DE / EN	20.09.2023	Date of first issue: 02.08.2022

STOT SE : Specific target organ toxicity - single exposure  
DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.  
DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - 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; 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
STOT SE 3	H336
Aquatic Chronic 2	H411

#### Classification procedure:

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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Carsystem KS-250

Version

1.1

DE / EN

Revision Date:

20.09.2023

Date of last issue: 02.08.2022

Date of first issue: 02.08.2022

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DE / EN