according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

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

1.1 Product identifier

Trade name : Carsystem KS-100

Product code : 126.032

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

Use of the Sub: Solvent-borne coatings, Corrosion inhibitor

stance/Mixture

Recommended restrictions : Reserved for industrial and professional use.

on use Industrial use, professional 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

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

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 vapor.

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

H336: May cause drowsiness or dizziness.

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure.

Long-term (chronic) aquatic hazard, Cat-

egory 3

H412: Harmful to aquatic life with long lasting ef-

fects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :







Signal Word : Warning

Hazard Statements : H226 Flammable liquid and vapor.

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.

Supplemental Hazard

Statements

EUH066

Repeated exposure may cause skin

dryness or cracking.

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 vapors.

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

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh

air and keep comfortable for breathing. Call a POISON

CENTER/ doctor if you feel unwell.

Storage:

P405 Store locked up.

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

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

Hydrocarbons, C9, Aromatics

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

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 : Mixture

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not Assigned 919-857-5 01-2119463258-33	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) Asp. Tox. 1; H304 EUH066	>= 5 - < 10
Hydrocarbons, C9, Aromatics	Not Assigned 918-668-5 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 5 - < 10

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	64742-82-1 919-446-0 01-2119458049-33	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT RE 1; H372 (Central nervous system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 5 - < 10
methanol	67-56-1 200-659-6 603-001-00-X 01-2119433307-44	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370 specific concentration limit STOT SE 1; H370 >= 10 % STOT SE 2; H371 3 - < 10 % Acute toxicity estimate Acute oral toxicity: 100 mg/kg Acute inhalation toxicity (vapor): 3 mg/l Acute dermal toxicity: 300 mg/kg	>= 0,1 - < 1

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 ad-

vice 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 material safety data sheet to the doctor in attend-

ance.

Protection of first-aiders : First Aid responders should pay attention to self-protection

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

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 respira-

tion.

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.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated

exposure.

Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (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 prod: :

ucts

Hazardous decomposition products due to incomplete com-

bustion

Carbon monoxide, carbon dioxide and unburned hydrocar-

bons (smoke).

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

5.3 Advice for firefighters

Special protective equipment :

for fire-fighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus. Use

personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances 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.

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 vapor formation use a respirator with an ap-

proved 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.

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Use only in well-ventilated areas.

Advice on protection against

fire and explosion

Vapors 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 stor-

age conditions

Keep away from heat and sources of ignition. Protect from

moisture. Keep away from direct sunlight.

Advice on common storage : Keep away from food and drink.

Storage class (TRGS 510) : 3

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
Hydrocarbons, C9- C11, n-alkanes,	Not As- signed	AGW	300 mg/m3	DE TRGS 900
isoalkanes, cyclics, < 2% aromatics				
	Peak-limit cat	egory: 2;(II)		
	Further information: Group exposure limit for hydrocarbon solvent mixtures			
methanol	67-56-1	TWA	200 ppm 260 mg/m3	2006/15/EC
	Further information: Indicative, Identifies the possibility of significant uptake			
	through the skin			
		AGW	100 ppm	DE TRGS
			130 mg/m3	900
	Peak-limit category: 2;(II)			
	Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
methanol	67-56-1	Methanol: 15 mg/l	In case of long-	TRGS 903
		(Urine)	term exposure:	

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version 1.1	DE / EN	Revision Date: 20.09.2023	Date of last issue: 01.06.2022 Date of first issue: 01.06.2022
			after more than one shift, Immedi-

ately after exposure or after work-

ing hours

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

Substance name	End Use	Routes of expo- sure	Potential health effects	Value
Hydrocarbons, C9- C11, n-alkanes, isoal- kanes, cyclics, < 2% aromatics	Workers	Inhalation	Long-term systemic effects	871 mg/m3
	Consumers	Inhalation	Long-term systemic effects	185 mg/m3
Hydrocarbons, C9, Aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Skin contact	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Skin contact	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
Hydrocarbons, C9- C12, n-alkanes, isoal- kanes, cyclics, aro- matics (2-25%)	Workers		Long-term systemic effects	330 mg/m3
	Workers		Long-term systemic effects	21 mg/kg bw/day
	Consumers		Long-term systemic effects	71 mg/m3
	Consumers		Long-term systemic effects	12 mg/kg bw/day
	Consumers		Long-term systemic effects	21 mg/kg bw/day
methanol	Consumers	Oral	Long-term systemic effects, Acute systemic effects	4 mg/kg bw/day
	Consumers	Skin contact	Long-term systemic effects, Acute systemic effects	4 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects, Acute sys- temic effects, Long- term local effects, Acute local effects	26 mg/m3
	Workers	Inhalation	Long-term systemic effects, Acute sys- temic effects, Acute local effects, Long- term local effects	130 mg/m3

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Workers Skin contact Long-term systemic effects, Acute systemic bw/day temic effects

8.2 Exposure controls

Personal protective equipment

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

Hand protection

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : >= 0,12 mm
Directive : DIN EN 374
Protective index : Class 6

Remarks : Gloves should be discarded and replaced if there is any indi-

cation 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

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 : Organic vapor Type (A)

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

Physical state : paste

Color : black

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Odor : characteristic

Melting point/freezing point : not determined

Boiling point/boiling range : 135 °C

Upper explosion limit / Upper

flammability limit

7 %(V)

Lower explosion limit / Lower :

flammability limit

0,6 %(V)

Flash point : 41 °C

Autoignition temperature : > 200 °C

pH : not determined substance/mixture is non-soluble (in water)

Viscosity

Viscosity, dynamic : 1.520.000 mPa.s (20 °C)

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : immiscible

Partition coefficient: n-

octanol/water

No data available

Vapor pressure : 15 hPa (50 °C)

Density : 1,28 g/cm3 (20 °C)

9.2 Other information

Explosives : Not explosive

In use, may form flammable/explosive vapor-air mixture.

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if used as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : None known.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Components:

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 inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 402

Hydrocarbons, C9, Aromatics:

Acute oral toxicity : LD50 Oral (Rat, female): ca. 3.492 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 6,193 mg/l

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Exposure time: 4 h
Test atmosphere: vapor

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Method: OECD Test Guideline 402

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 13,1 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rat): ca. 3.400 mg/kg

methanol:

Acute oral toxicity : Acute toxicity estimate: 100 mg/kg

Method: Expert judgment

LD50 (Rat): 1.187 - 2.769 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Expert judgment

Acute dermal toxicity : Acute toxicity estimate: 300 mg/kg

Method: Expert judgment

LD50 Dermal (Rabbit): 17.100 mg/kg

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Components:

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

Assessment : Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C9, Aromatics:

Result : Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

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.

Germ cell mutagenicity

Not classified based on available information.

Components:

Hydrocarbons, C9, Aromatics:

Germ cell mutagenicity- As- : Classified based on benzene content < 0.1% (Regulation (EC)

sessment 1272/2008, Annex VI, Part 3, Note P)

Carcinogenicity

Not classified based on available information.

Components:

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

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

ment

Hydrocarbons, C9, Aromatics:

Carcinogenicity - Assess- : Classified based on benzene content < 0.1% (Regulation (EC)

ment 1272/2008, Annex VI, Part 3, Note P)

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

May cause drowsiness or dizziness.

Components:

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

Assessment : May cause drowsiness or dizziness.

Hydrocarbons, C9, Aromatics:

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

dizziness.

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Assessment : May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Components:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Target Organs : Central nervous system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Aspiration toxicity

Not classified based on available information.

Components:

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

May be fatal if swallowed and enters airways.

Hydrocarbons, C9, Aromatics:

May be fatal if swallowed and enters airways.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

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 consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

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

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

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 tox-

icity)

: NOELR: 0,131 mg/l Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOELR: 0,23 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Ecotoxicology Assessment

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

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

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/aquatic

plants

NOELR (Pseudokirchneriella subcapitata (green algae)): 1

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOELR: 1,228 mg/l Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

NOELR: 2,144 mg/l Exposure time: 21 d

ic toxicity)

Species: Daphnia magna (Water flea)

Ecotoxicology Assessment

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

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 10 - 30 mg/l

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

End point: mortality Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 10 - 22 mg/l

End point: Immobilization Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 4,1

mg/

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOELR: 0,28 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.

methanol:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15.400 mg/l

Exposure time: 96 h Method: EPA-660/3-75-00

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): ca.

22.000 mg/l

End point: Growth rate Exposure time: 96 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOEC: 450 mg/l Exposure time: 90 d

Species: Fish

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 208 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Components:

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

Biodegradability : Result: Readily biodegradable.

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

Biodegradation: 80 % Exposure time: 28 d

Hydrocarbons, C9, Aromatics:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 78 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Biodegradability : Result: Readily biodegradable.

Biodegradation: 75 %

Related to: Chemical oxygen demand

Exposure time: 28 d

Method: OECD Test Guideline 301F

methanol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 71,5 - 95 %

Method: OECD Test Guideline 301D

12.3 Bioaccumulative potential

Components:

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

Partition coefficient: n-

octanol/water

: log Pow: > 4

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Partition coefficient: n-

octanol/water

: $\log Pow: >= 3,17 (20 °C)$

methanol:

Bioaccumulation : Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): 10

Partition coefficient: n-

octanol/water

: log Pow: -0,77 (20 °C)

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

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 DE / EN 20.09.2023 Date of first issue: 01.06.2022 1.1

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

: The substance/mixture does not contain components consid-Assessment

> ered 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 infor- : No data available

mation

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 con-

tainer 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 han-

dling site for recycling or disposal.

Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of in accordance with local regulations.

The following Waste Codes are only suggestions: Waste Code

08 01 11, waste paint and varnish containing organic solvents

or other hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADN UN 1139 **ADR** UN 1139 **RID** : UN 1139 **IMDG** UN 1139 IATA UN 1139

14.2 UN proper shipping name

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version		Revision Date:	Date of last issue: 01.06.2022
1.1	DE / EN	20.09.2023	Date of first issue: 01.06.2022

ADN : COATING SOLUTION

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

aromatics, Hydrocarbons, C9, Aromatics)

ADR : COATING SOLUTION

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

aromatics, Hydrocarbons, C9, Aromatics)

RID : COATING SOLUTION

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

aromatics, Hydrocarbons, C9, Aromatics)

IMDG : COATING SOLUTION

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

aromatics, Hydrocarbons, C9, Aromatics)

IATA : Coating solution

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

aromatics, Hydrocarbons, C9, Aromatics)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADN	:	3	
ADR	:	3	
RID	:	3	
IMDG	:	3	
ΙΔΤΔ		3	

14.4 Packing group

ADN

Packing group : III
Classification Code : F1
Labels : 3

ADR

Packing group : III
Classification Code : F1
Labels : 3
Tunnel restriction code : (E)

RID

Packing group : III
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, <u>S-E</u>

IATA (Cargo)

Packing instruction (cargo : 366

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passen: 355

ger aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

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

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: Number on list 75, 3

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

methanol (Number on list 75, 69)

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

: Not applicable

Regulation (EC) No 1005/2009 on substances that de- : Not applicable

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

plete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollu- : Not applicable

tants (recast)

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Seveso III: Directive 2012/18/EU of the Euro- P5c FLAMMABLE LIQUIDS

pean Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

Water hazard class (Germa: WGK 2 obviously hazardous to water

ny) Classification according to AwSV, Annex 1 (5.2)

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.

SECTION 16: Other information

Full text of H-Statements

H225 : Highly flammable liquid and vapor. H226 : Flammable liquid and vapor.

H301 : Toxic if swallowed.

H304 : May be fatal if swallowed and enters airways.

H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.

H335 : May cause respiratory irritation. H336 : May cause drowsiness or dizziness.

H370 : Causes damage to organs.

H372 : Causes damage to organs through prolonged or repeated

exposure.

H411 : Toxic to aquatic life with long lasting effects.

EUH066 : Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Asp. Tox. : Aspiration hazard Flam. Liq. : Flammable liquids

STOT RE : Specific target organ toxicity - repeated exposure STOT SE : Specific target organ toxicity - single exposure 2006/15/EC : Europe. Indicative occupational exposure limit values

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

TRGS 903 : c - Biological limit values 2006/15/EC / TWA : Limit Value - eight hours 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; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada): ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; 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: Classification procedure:

Flam. Liq. 3	H226	Based on product data or assessment
STOT SE 3	H336	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 3	H412	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

according to Regulation (EC) No. 1907/2006

Carsystem KS-100

Version Revision Date: Date of last issue: 01.06.2022 1.1 DE / EN 20.09.2023 Date of first issue: 01.06.2022

material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN