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E-mail: info@chamaeleon-produktion.de http://www.chamaeleon-produktion.de

Revision date: 16.01.2018

SAFETY DATA SHEET according to 1907/2006/EC, Article 31

1- IDENT<u>IFICATION OF THE SUBSTANCE/PREPARATION AND THE</u> **COMPANY/UNDERTAKING**

Product details

Trade name: 2K Clear Coat **Article number:** 11012

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

No further relevant information available.

Sector of Use:

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category: PC9a Coatings and paints, thinners, paint removers

Process category:

PROC7 Industrial spraying PROC11 Non industrial spraying

Intended use: Car refinishing Product/ Clear coating material, Varnish

Manufacturer/Supplier: Chamäleon GmbH

Rudolf-Diesel-Straße, 8a, 69115 Heidelberg -- Germany

Further information obtainable from: Product Safety Department **Information in case of emergency:** + 49 70024112112 (CH)

2 – HAZARDS IDENTIFICATION

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation. Skin Sens. 1 H317 May cause an allergic skin reaction.



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STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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

Signal word Danger

Hazard-determining components of labelling:

aliphatic polycyanate

acetone

Solvent naphtha (petroleum), light arom.

Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacat

Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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.

P280 Wear protective gloves / eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

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

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

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH204 Contains isocyanates. May produce an allergic reaction.

Buildup of explosive mixtures possible without sufficient ventilation.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.



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3- COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 115-10-6	dimethyl ether	25-<50%
EINECS: 204-065-8 Index number: 603-019-00-8 Reg.nr.: 01-2119472128-37	Flam. Gas 1, H220; Press. Gas C, H280	
CAS: 67-64-1	acetone	12.5-<20%
EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 123-86-4	n-butyl acetate	5-<10%
EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	Flam. Liq. 3, H226; STOT SE 3, H336	
CAS: 1330-20-7	xylene, mixture of isomers	5-<10%
EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	Flam. Liq. 3, H226 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	
CAS: 28182-81-2 NLP: 500-060-2 Reg.nr.: 01-2119485796-17	aliphatic polycyanate	2.5-<5.0%
	Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3,H335	
CAS: 110-12-3	5-methylhexan-2-one	<2.5%
EINECS: 203-737-8 Index number: 606-026-00-4	Flam. Liq. 3, H226 Acute Tox. 4, H332	
CAS: 100-41-4 EINECS: 202-849-4 Index number: 601-023-00-4 Reg.nr.: 01-2119489370-35	ethylbenzene	<2.5%
	Flam. Liq. 2, H225 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H332 Aquatic Chronic 3, H412	
CAS: 64742-95-6 EINECS: 265-199-0 Index number: 649-356-00-4 Reg.nr.: 01-2119486773-24	Solvent naphtha (petroleum), light arom.	<2.5%
	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H335-H336	



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CAS: 108-10-1	4-methylpentan-2-one	<2.5%
EINECS: 203-550-1 Index number: 606-004-00-4 Reg.nr.: 01-2119473980-30	Flam. Liq. 2, H225 Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3,H335	
CAS: 53880-05-0 NLP: 500-125-5	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers	<1%
Reg.nr.: 01-2119488734-24	Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 41556-26-7 EINECS: 255-437-1 Reg.nr.: 01-2119491304-40	Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacat	≤0.5%
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	

Additional information:

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1A 1272/2008 EU), so the classification as carcinogen need not to apply. For the wording of the listed hazard phrases refer to section 16.

4- FIRST - AID MEASURE

Description of first aid measures

After inhalation:

Supply fresh air and to be sure call for a 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.

After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

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

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

<u>5– FIRE - FIGHTING MEASURE</u>

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

Special hazards arising from the substance or mixture:

During heating or in case of fire poisonous gases are produced.

Advice for firefighters -

Protective equipment: Mouth respiratory protective device..



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<u>6– ACCIDENTAL RELEASE MEASURE</u>

Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation..

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.

7- HANDLING AND STORAGE

Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Storage class: 2B

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

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Ingredients with limit values that require monitoring at the workplace:	
115-10-6 dimethyl ether	
WEL Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm	
67-64-1 acetone	
WEL	Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm



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WEL L 1330-20-7 xyl S WEL L S S WEL L S S S MEL S S MEL S S S MEL S S S MEL MEL	Short-term value: 966 mg/m³, 200 ppm Long-term value: 724 mg/m³, 150 ppm lene, mixture of isomers Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV tethylhexan-2-one Short-term value: 475 mg/m³, 100 ppm Long-term value: 95 mg/m³, 20 ppm Sk
WEL S S S S S S S S S	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV tethylhexan-2-one Short-term value: 475 mg/m³, 100 ppm Long-term value: 95 mg/m³, 20 ppm Sk Vlbenzene
WEL I. S S S WEL I. S S S S S S S S S	Long-term value: 220 mg/m³, 50 ppm Sk; BMGV methylhexan-2-one Short-term value: 475 mg/m³, 100 ppm Long-term value: 95 mg/m³, 20 ppm Sk ylbenzene
WEL S 100-41-4 ethy S	Short-term value: 475 mg/m³, 100 ppm Long-term value: 95 mg/m³, 20 ppm Sk vlbenzene
WEL L S 100-41-4 ethy	Long-term value: 95 mg/m³, 20 ppm Sk ylbenzene
S	
	Short-term value: 552 mg/m³, 125 ppm
	Long-term value: 441 mg/m³, 100 ppm Sk
108-10-1 4-me	ethylpentan-2-one
WEL L	Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm Sk, BMGV
Ingredients w	vith biological limit values:
1330-20-7 xyl	lene, mixture of isomers
BMGV S	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
108-10-1 4-me	nethylpentan-2-one
BMGV N	20 μmol/L Medium: urine Sampling time: post shift Parameter: 4-methylpentan-2-one

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

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Avoid contact with the eyes.



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Respiratory protection:

Filter AX

Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposurebuse self-contained respiratory protective device.

Protection of hands:

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g. KCL Camatril, article no. 898 or similar products.

Solvent resistant gloves.

Protective gloves

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

Natural rubber, NR

Butyl rubber, BR

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

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

Acetone: 480 min Butvl acetate: 60 min Ethyl acetate: 170 min

Xylene: 42 min

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

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable: Natural rubber, NR

Eve protection: Tightly sealed goggles

9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information

Appearance:

Form: Aerosol

Colour: According to product specification

Characteristic **Odour:** Not determined. **Odour threshold:**



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pH-value:	Not determined.	
Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling range	e:Not applicable, as aerosol.	
Flash point:	Not applicable, as aerosol.	
Flammability (solid, gas):	Not applicable.	
Ignition temperature:	240 °C (464 °F)	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Not determined	
Explosion limits:		
Lower:	2.6 Vol %	
Upper:	26.2 Vol %	
Vapour pressure at 20 °C (68 °F):	4 hPa (3 mm Hg)	
Density at 20 °C (68 °F):	$0.83 \text{ g/cm}^3 (6.93 \text{ lbs/gal})$	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with water:	Not miscible or difficult to mix.	
Partition coefficient: n-octanol/water	Partition coefficient: n-octanol/water: Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:	22.2.2	
Organic solvents:	83.3 %	
VOC- (EC)	 (00.1 - /I	
VOC EU0/	689.1 g/l 83.28 %	
VOC-EU%		
Solids content:	16.3 %	
Other information	No further relevant information available.	

10-STABILITY AND REACTIVITY

Reactivity: No further relevant information available.

Chemical stability

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid No further relevant information available.



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Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

<u>11– TOXILOGICAL INFORMATION</u>

Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:			
67-64-1 acetone			
Oral	LD50	5,800 mg/kg (rat)	
Dermal	LD50	>15,800 mg/kg (rabbit)	
Inhalative	LC50 / 4h	76 mg/l (rat)	
123-86-4 n-buty	123-86-4 n-butyl acetate		
Oral	LD50	10,800 mg/kg (rat)	
Dermal	LD50	>17,600 mg/kg (rabbit)	
Inhalative	LC50/4 h	1.85 mg/l (rat)	
1330-20-7 xylene, mixture of isomers			
Oral	LD50	3,523 mg/kg (rat)	
Dermal	LD50	2,000 mg/kg (rabbit)	
Inhalative	LC50/4 h	29,000 mg/m3 (rat)	
108-10-1 4-methylpentan-2-one			
Oral	LD50	2,080 mg/kg (rat)	
Dermal	LD50	>2,000 mg/kg (rat)	
41556-26-7 Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacat			
Oral	LD50	3,230 mg/kg (rat)	

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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 drowsiness or dizziness.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.



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<u>12 – ECOLOGICAL INFORMATION</u>

Toxicity

Aquatic toxicity:	
115-10-6 dimethyl ether	
EC50 / 96 h	155 mg/l (algae)
LC50 / 48 h	>4,000 mg/l (daphnia magna)
LC50 / 96 h	>4,000 mg/l (fish)
67-64-1 acetone	
LC50/96h	8,300 mg/l (fish)
EC50/96h	7,200 mg/l (algae)
LC50 / 48 h	8,450 mg/l (crustacean (water flea))
123-86-4 n-buty	l acetate
LC50/96h	81 mg/l (fish)
1330-20-7 xylen	e, mixture of isomers
EC50 / 48 h	7.4 mg/l (daphnia magna)
LC50 / 96 h	13.5 mg/l (fish)
108-10-1 4-meth	nylpentan-2-one
EC50 / 48 h	275 mg/l (daphnia magna)
LC50 / 96 h	179 mg/l (fish)

Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxical effects:

Remark: Harmful to fish

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms.

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

Other adverse effects No further relevant information available.

13- DISPOSAL CONSIDERATION

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.



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European	European waste catalogue	
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances	
15 01 04	metallic packaging	
15 01 10*	packaging containing residues of or contaminated by hazardous substances	

Uncleaned packaging:

Recommendation: Non contaminated packagings may be recycled.

14- TRANSPORT INFORMATION

UN-Number

ADR, IMDG, IATA UN1950

UN proper shipping name

1950 AEROSOLS **ADR IMDG AEROSOLS**

IATA AEROSOLS, flammable

Transport hazard class(es)

ADR



2 5F Gases. Class

Label 2.1



IMDG, IATA

Class 2.1 Label 2.1

Packing group

ADR, IMDG, IATA not regulated

Environmental hazards: Not applicable

Special precautions for user Warning: Gases.

Danger code (Kemler):

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EMS Number: F-D,S-U

Stowage Code: SW1 Protected from sources of heat.

> SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear

of living quarters.

Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre:

> Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity

above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class 2

Transport in bulk according to Annex II of

Not applicable. Marpol and the IBC Code

Transport/Additional information:

ADR

1L Limited quantities (LQ)

Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

Transport category 2 **Tunnel restriction code** D

IMDG

Limited quantities (LQ) 1L

Code: E0 **Excepted quantities (EQ)**

Not permitted as Excepted Quantity

UN "Model Regulation": UN 1950 AEROSOLS, 2.1

<u>15 – REGULATORY INFORMATION</u>

Safety, health and environmental regulations/legislation specific for the substance or mixture **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40 **National regulations:**

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.



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16-OTHER INFORMATION

Relevant phrases

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- 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.

The information contained in these sheets is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects and should not be construed as any guarantee of technical performance or suitability for particular applications.



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