

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

Printing date 31.07.2014

Revision: 04.07.2014

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

- **Product identifier**
- **Trade name:** Aerosol 2K Rapid Klarlack (n) (mit A)
- **Article number:** REZ334
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture:**
FOR PROFESSIONAL USE ONLY
painting
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Peter Kwasny GmbH
Heilbronner Str. 96
D-74831 Gundelsheim
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:** Tel.: +49 6269 95 20
- **national:**
National Poisons Information Service, Birmingham
Tel.: (0) 12 15 07 55 88/9

Tel.: 0049-(0)6269-95-20
E-mail: labor@kwasny.de

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 heated.



GHS07

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

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20: Harmful by inhalation.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



F+; Extremely flammable

R12: Extremely flammable.

R18-66: In use, may form flammable/explosive vapour-air mixture. Repeated exposure may cause skin dryness or cracking.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

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- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **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:**

Aliphatisches Polyisocyanat

Mixture of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers

- **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.

- **Precautionary statements**

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

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P261 Avoid breathing vapours/spray.

P280 Wear protective gloves/eye protection.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

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

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

- **Additional information:**

Without adequate ventilation, explosive atmosphere/gas mix may be created.

Contains isocyanates. May produce an allergic reaction.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

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· Dangerous components:		
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37-xxxx	dimethyl ether  F+ R12 R18 -----  Flam. Gas 1, H220; Press. Gas, H280	25-50%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49-xxxx	acetone  Xi R36;  F R11 R66-67 -----  Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-xxxx	xylene  Xn R20/21;  Xi R38 R10 -----  Flam. Liq. 3, H226;  Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	5-10%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-xxxx	n-butyl acetate R10-66-67 -----  Flam. Liq. 3, H226;  STOT SE 3, H336	5-10%
CAS: 28182-81-2	Aliphatisches Polyisocyanat  Xn R20;  Xi R37;  Xi R43 -----  Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	5-10%
CAS: 110-12-3 EINECS: 203-737-8	5-methylhexan-2-one  Xn R20 R10 -----  Flam. Liq. 3, H226;  Acute Tox. 4, H332	1-2.5%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene  Xn R20;  F R11 -----  Flam. Liq. 2, H225;  Acute Tox. 4, H332	1-2.5%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one  Xn R20;  Xi R36/37;  F R11 R66 -----  Flam. Liq. 2, H225;  Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335	1-2.5%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. benzene < 0,1 %  Xn R65;  Xi R37;  N R51/53 R10-66-67 -----  Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  Acute Tox. 4, H332; STOT SE 3, H335- H336	1-2.5%
CAS: 53880-05-0 EINECS: 204-658-1	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers  Xi R43 -----  Skin Sens. 1, H317	<1%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene  Xn R20;  Xi R36/37/38;  N R51/53 R10 -----  Flam. Liq. 3, H226;  Aquatic Chronic 2, H411;  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<1%

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ELINCS: 400-830-7	Mixture of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)  Xi R43;  N R51/53  Aquatic Chronic 2, H411;  Skin Sens. 1, H317	<1%
CAS: 108-67-8 EINECS: 203-604-4	mesitylene  Xi R37;  N R51/53 R10  Flam. Liq. 3, H226;  Aquatic Chronic 2, H411;  STOT SE 3, H335	<1%

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

4 First aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air 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 eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **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.

5 Firefighting measures

- **Extinguishing media -**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Cool container with water
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** Can form explosive gas-air mixtures.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
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.
Do not flush with water or aqueous cleansing agents

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- **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

- **Handling:**
- **Precautions for safe handling**
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Take note of emission threshold.
Use only in well ventilated areas.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **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/m ³ , 500 ppm Long-term value: 766 mg/m ³ , 400 ppm
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67-64-1 acetone

WEL ()	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm
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1330-20-7 xylene

WEL ()	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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123-86-4 n-butyl acetate

WEL ()	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
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110-12-3 5-methylhexan-2-one

WEL ()	Short-term value: 475 mg/m ³ , 100 ppm Long-term value: 95 mg/m ³ , 20 ppm Sk
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100-41-4 ethylbenzene

WEL () Short-term value: 552 mg/m³, 125 ppm
Long-term value: 441 mg/m³, 100 ppm
Sk

108-10-1 4-methylpentan-2-one

WEL () Short-term value: 416 mg/m³, 100 ppm
Long-term value: 208 mg/m³, 50 ppm
Sk, BMGV

· **Ingredients with biological limit values:****1330-20-7 xylene**

BMGV () 650 mmol/mol creatinine
Medium: urine
Sampling time: post shift
Parameter: methyl hippuric acid

108-10-1 4-methylpentan-2-one

BMGV () 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.

· **Respiratory protection:**

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

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Half mask with combination filter, class A1P2 minimum, or breathing mask with outer air supply.

· **Protection of hands:**

Protective gloves

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

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

· **Material of gloves** Nitrile rubber, NBR· **Penetration time of glove material**

Gloves must be changed after every contamination.

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 of a maximum of 15 minutes gloves made of the following materials are suitable:**

butyl rubber, 0,7mm

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

· **pH-value:** Not determined.· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Not applicable, as aerosol.

· **Flash point:** < 0 °C
Without propellant gas.· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 235 °C· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.· **Explosion limits:**

· Lower:	2.6 Vol %
· Upper:	18.6 Vol %

· **Vapour pressure at 20 °C:** 3400 hPa· **Density:** Not determined.· **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):** Not determined.· **Viscosity:**

· Dynamic:	Not determined.
· Kinematic:	Not determined.

· **Solvent content:**

· **Organic solvents:** 78.9 %
With propellant gas. Content given by weight.

· **Solids content:** 21.1 %· **Other information** No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with acids, alkalis and oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Possible in traces.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4 h	21.7 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful
Irritant

12 Ecological information

- **Toxicity**

· **Aquatic toxicity:**

1330-20-7 xylene

LC50/96h	1570 µg/l (Cyprinus carpio)
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- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Empty aerosols can be disposed with the ordinary waste.

- **European waste catalogue**

15 01 10*	packaging containing residues of or contaminated by dangerous substances
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

- **Transport hazard class(es)**

- **ADR**



- **Class** 2 5F Gases.
- **Label** 2.1

- **IMDG, IATA**



- **Class** 2.1
- **Label** 2.1

- **Packing group**

- **ADR, IMDG, IATA** Void
not classified

- **Environmental hazards:**

- **Marine pollutant:** No

- **Special precautions for user** Warning: Gases.

- **Danger code (Kemler):** -
not classified

- **EMS Number:** F-D,S-U

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)** 1L
- **Transport category** 2

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· Tunnel restriction code	D
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15 Regulatory information

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

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	50-100

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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

16 Other information

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

· **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.
H411	Toxic to aquatic life with long lasting effects.
R10	Flammable.
R11	Highly flammable.
R12	Extremely flammable.
R18	In use, may form flammable/explosive vapour-air mixture.
R20	Harmful by inhalation.
R20/21	Harmful by inhalation and in contact with skin.
R36	Irritating to eyes.
R36/37	Irritating to eyes and respiratory system.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Product safety department

· **Contact:** Hr. Hamberger

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

*** Data compared to the previous version altered.**

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