



Printing date 18.12.2019 Revision: 18.12.2019

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

- · 1.1 Product identifier
- · Trade name: Aerosol Markierungfarben Diverse
- · Article number (product ID.): REZ80
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture: painting
- · Uses advised against No further relevant information available.
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Peter Kwasny GmbH Heilbronner Str. 96 D-74831 Gundelsheim

D-74831 Gundelsheim Tel.: 0049-(0)6269-95-20 E-mail: labor@kwasny.de

- $\cdot \textit{Further information obtainable from:} \ \textit{Product safety department}$
- · 1.4 Emergency telephone number: Tel.: +49 6269 95 20
- · national:

National Poisons Information Service, Birmingham

Tel.: 844 892 0111

· K-Nr. 0001

### SECTION 2: Hazards identification

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



GHS02 flame

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



Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H336 May cause drowsiness or dizziness.

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

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms





GHS02

· Signal word Danger

· Hazard-determining components of labelling: acetone

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#### Trade name: Aerosol Markierungfarben Diverse

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ethyl acetate

EC927-241-2 Naphtha (petroleum), hydrotreated light

2-methoxy-1-methylethyl acetate

#### · Hazard statements

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

H319 Causes serious eye irritation.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.

P103 Read label before use.

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. P261 Avoid breathing vapours/spray.

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

*P273* Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell. 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.

EUH208 Contains CAS 222716-38-3 Polyamide and fatty acid derivatives. May produce an allergic reaction.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49-xxxx	acetone  Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336	25-<50%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-xxxx	ethyl acetate  Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220; Press. Gas C, H280	10-<25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane (containing ≤ 0,1 % butadiene (203-450-8))  Flam. Gas I, H220; Press. Gas C, H280	10-<25%
EC number: 927-241-2 Reg.nr.: 01-2119471843-32-xxxx	EC927-241-2 Naphtha (petroleum), hydrotreated light Asp. Tox. 1, H304;  STOT SE 3, H336; Aquatic Chronic 3, H412	5-<10%

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CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane (containing ≤ 0,1 % butadiene (203-450-8)) ♦ Flam. Gas 1, H220; Press. Gas C, H280	5-<10%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate  Flam. Liq. 3, H226;  STOT SE 3, H336	1-<2.5%
CAS: 222716-38-3	CAS 222716-38-3 Polyamide and fatty acid derivatives  STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.1-<0.25%

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

#### SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

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

- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media -
- · Suitable extinguishing agents: Cool container whit water
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 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.

· 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## SECTION 7: Handling and storage

#### · 7.1 Precautions for safe handling

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Pressurised 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.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · 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: None.
- · 7.3 Specific end use(s) No further relevant information available.

## SECTION 8: Exposure controls/personal protection

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

· Ingreatents with timit v	vaiues inai reauire	monitoring at the workplace:

#### 67-64-1 acetone

WEL Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm

#### 141-78-6 ethyl acetate

WEL Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm

#### $106-97-8 \ butane \ (containing \le 0.1 \ \% \ butadiene \ (203-450-8))$

WEL Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

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

WEL Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm Sk

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Respiratory protection:



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.

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#### · 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 trough 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

· Eye protection:



Tightly sealed goggles

SECTION	9: Physical and chemical properties
· 9.1 Informa	tion on basic physical and chemical properties
· General Info	
· Annearance	•

Form: Aerosol
Colour: According to product specification

Odour: Characteristic
 Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Not applicable, as aerosol.

• Flash point: <0 °C

Without propellant gas.

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 365 °C

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of explosive air/

vapour mixtures are possible. Not determined.

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Explosion limits:Lower:Upper:1.5 Vol %13 Vol %

· Vapour pressure at 20 °C: 3,600 hPa

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· 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:	86.3 %
-	With propellant gas. Content given by weight.
VOC (EU)	86.28 %
Solids content:	14.3 %
· 9.2 Other information	No further relevant information available.

### SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- $\cdot \textbf{ 10.5 Incompatible materials:} \ \textit{No further relevant information available}.$
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

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

## SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.

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- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · 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.

Do not allow product to reach ground water, water course of sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Ikke relevant.
- · 12.6 Other adverse effects No further relevant information available.

### SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

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

· European waste catalogue

15 01 10\* packaging containing residues of or contaminated by hazardous substances

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

## SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR, IMDG, IATA UN1950
- · 14.2 UN proper shipping name

· ADR 1950 AEROSOLS
· IMDG AEROSOLS

· IATA AEROSOLS, flammable

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



· Class 2 5F Gases.

• *Label* 2.1

· IMDG, IATA



· Class
 · Label
 2.1
 2.1

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14.4 Packing group ADR, IMDG, IATA	Void not classified
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Danger code (Kemler):	Warning: Gases. - not classified
EMS Number:	F-D,S-U
Stowage Code	SW1 Protected from sources of heat.
Segregation Code	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.  SG69 For AEROSOLS with a maximum capacity of 1 litre Segregation as for class 9. Stow "separated from" class 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.
14.7 Transport in bulk according to Ana Marpol and the IBC Code	nex II of Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	IL Code: E0 Not permitted as Excepted Quantity
Transport category Tunnel restriction code	2 D
IMDG	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity

## **SECTION 15: Regulatory information**

- $\cdot$  15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture VOC:  $<\!840g/\!l$
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- $\cdot$  Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	50-100

- · Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

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

### · 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.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye 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.

H412 Harmful to aquatic life with long lasting effects.

## · Department issuing SDS: Product safety department

#### · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases - Category 1

Aerosol 1: Aerosols - Category 1

Press. Gas C: Gases under pressure - Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity - oral - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard — Category 3

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