

Rely on 17.

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

Printing date 26.09.2017 Version: 10 Revision: 26.09.2017

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

- · 1.1 Product identifier
- · Trade name: RENOLIT ALKORPLUS 81068
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Adhesives
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

RENOLIT Belgium NV

Industriepark De Bruwaan 43

B-9700 Oudenaarde - Belgium

Tel: +32 5533 9711 Fax: +32 5531 9650

E-mail: renolit.belgium@renolit.com / dirk.vandersype@renolit.com

- · Further information obtainable from: Tel: + 32 5533 9711
- · 1.4 Emergency telephone number: Tel: +44 (0) 1235 239 670 (24 hours, 7 days)

SECTION 2: Hazards identification

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



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · 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

GHS07

GHS08

GHS09

· Signal word Danger

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· Hazard-determining components of labelling:

diphenylmethanediisocyanate,isomeres and homologues

tris(nonylphenol)phosphiet (TNPP)

· Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P210 Keep away from open flames. - No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / eye protection.

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. P402+P404 Store in a dry place. Store in a closed container.

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

· Additional information:

Contains isocyanates. May produce an allergic reaction.

Restricted to professional users.

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

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous compor	nents:	
CAS: 110-82-7 EINECS: 203-806-2	cyclohexane The property of t	2.5-10%
CAS: 79-20-9 EINECS: 201-185-2	methyl acetate The property of the property o	2.5-10%
CAS: 9016-87-9 Polymer	diphenylmethanediisocyanate,isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	2.5-10%
CAS: 141-78-6 EINECS: 205-500-4	ethyl acetate † Flam. Liq. 2, H225; † Eye Irrit. 2, H319; STOT SE 3, H336	2.5-10%
CAS: 26523-78-4 EINECS: 247-759-6	tris(nonylphenol)phosphiet (TNPP) \$\Psi\$ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; \$\Psi\$ Skin Sens. 1, H317	<2.5%

· 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

· General information:

Personal protection for the First Aider.

Remove contaminated clothing. If symptoms persist or in cases of doubt seek medical advice.

· After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air and to be sure call for a doctor.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing:

Rinse mouth with water.

If symptoms persist consult doctor.

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- · 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: CO2, extinguishing powder or water spray. Fight larger fires with water spray or foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.: Carbon monoxide (CO)

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

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:

Prevent seepage into sewage system, workpits and cellars.

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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

As of July 2003, organizations in the EU must follow the directives to protect employees from explosion risk in areas with an explosive atmosphere.

There are two ATEX directives (one for the manufacturer and one for the user of the equipment):

- the ATEX 95 equipment directive 94/9/EC, Equipment and protective systems intended for use in potentially explosive atmospheres;
- the ATEX 137 workplace directive 99/92/EC, Minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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.

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· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

110-82-7 cyclohexane

WEL Short-term value: 1050 mg/m³, 300 ppm Long-term value: 350 mg/m³, 100 ppm

79-20-9 methyl acetate

WEL Short-term value: 770 mg/m³, 250 ppm Long-term value: 616 mg/m³, 200 ppm

141-78-6 ethyl acetate

WEL Short-term value: 400 ppm Long-term value: 200 ppm

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

- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Wear high-quality protective equipment during operations such as grinding, drilling and/or sawing

Dust mask FFP3 (Filtering Facepiece Partikel) (EN 149: 2001)

Gloves (grinding) (EN388 (4.1.3.1)) Safety glasses (EN166-168, 170)

Hearing protection (EN352-2)

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Store protective clothing separately.

The usual precautionary measures are to be adhered to when handling chemicals.

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 and skin.

Do not carry product impregnated cleaning cloths in trouser pockets.

· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Oxygen content of the inhalation air must be sufficient i.e. > 17%

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

Filter AXP3(EN371)
• Protection of hands:



Protective gloves

Nitrile rubber gloves (EN374, EN388:4101).

Permeation EN374-3: 2003 (minutes)> 480 minutes

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation While wearing protective gloves cotton single-use undergloves are recommendable. However, these undergloves must be discarded after each use to avoid potential exposure to absorbed product.

· Material of gloves

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

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 gloves made of the following materials are suitable: Nitril rubber, NBR
- · For contact of maximum 15 minutes, gloves made of the following materials are suitable: Nitrile rubber, NBR
- · Eye protection:



Tightly sealed goggles

Safety glasses(EN166)

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· Body protection: Protective work clothing(EN 340, 463, 468, 943-1, 943-2)

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9.1 Information on basic physical General Information	l and chemical properties
Appearance:	
Form:	Fluid
Colour:	Light yellow
Odour:	Characteristic
pH-value:	Not applicable.
Change in condition Initial boiling point and boiling	range: 57 °C
Flash point:	-18 ℃
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixture are possible.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density at 20 °C:	1 g/cm³
Solubility in / Miscibility with water(20°C):	Not miscible or difficult to mix.
Viscosity:	
Dynamic (20°C):	6000 mPa.s
Kinematic at 20 °C:	380 s (ISO 6 mm)
Solvent content:	
Organic solvents:	16.0 %
Solids content:	84.0 %
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.
- · 10.5 Incompatible materials: Oxidizing agents
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

The product has not been tested. The statements underneath have been derived from the properties of the individual components.

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

· LD/LC50 values relevant for classification: 110-82-7 cyclohexane			
Oral	LD50	>5,000 mg/kg (Rat)	
Dermal	LD50	>2,000 mg/kg (Rabbit)	
		·	(Contd. on page 6)

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79-20-9 m	1-20-9 methyl acetate		
Oral	LD50	>5,000 mg/kg (Rat) Referenz: Food and Cosmetics Toxicology. Vol. 17, Pg. 859, 1979.	
Dermal	LD50	>5,000 mg/kg (Rabbit) Referenz: Food and Cosmetics Toxicology. Vol. 17, Pg. 859, 1979.	
9016-87-9	diphenylmethanediisocyanat	e,isomeres and homologues	
Oral	LD50	>10,000 mg/kg (Rat) Referenz: National Technical Information Service. Vol. OTS0516728,	
Dermal	LD50	>9,400 mg/kg (Rabbit) Referenz: Office of Toxic Substances Report. Vol. OTS0517028	
Inhalative	ATE mix dust/mist (calculated)	1.5 mg/l, 4h (Rat) (Expert judgement)	
141-78-6 ethyl acetate			
Oral	LD50	5,620 mg/kg (Rabbit)	
Inhalative	LC50, 4h	1,600 mg/l (Rat)	

- Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· Acute effects (acute toxicity, irritation and corrosivity)	
9016-87-9 diphenylmethanediisocyanate,isomeres and homologues	
OECD 405, slijmvliesirritatie	(Rabbit)
	Toxicological study of a comparable product

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Carc. 2

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity

Suspected of causing cancer.

- · Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure

May cause respiratory irritation.

- · 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:		
110-82-7 cyclohexane		
LC50, 96h	4.53 mg/l (Fathered minnow, Pimephales promelas)	
EC50, 48h	0.9 mg/l (Daphnia magna)	
EC50, 72h	3.4 mg/l (Algae)	
79-20-9 methyl aceta	te	
LC50, 96h	>300 mg/l (Pimephales Promelas)	
EC50, 48h	>1,000 mg/l (Daphnia magna)	
9016-87-9 diphenylm	9016-87-9 diphenylmethanediisocyanate,isomeres and homologues	
LC0, 96h	>1,000 mg/l (Zebrabärbling)	
EC50, 24h	>1,000 mg/l (Daphnia magna)	
EC50, 24h OECD 202	>1,000 mg/l (Daphnia magna)	
EC50, 72h OECD201	>1,640 mg/l (Scenedesmus subspicatus)	
141-78-6 ethyl acetate	141-78-6 ethyl acetate	
LC50, 96h	>230 mg/l (Fish)	
EC50, 24h	>164 mg/l (Daphnia magna)	
40.0 Paralatana and dama da hillto Na furth a malayant information available		

• 12.2 Persistence and degradability No further relevant information available.

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· 12.3 Bioaccumulative potential

79-20-9 methyl acetate

log Kow 0.18 (no species defined)

Empfohlener Wert der LOG KOW Datenbank.

- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Other information:

Ecotoxicological data have not been determined specifically for this product. Information given is based on knowledge of the components and the ecotoxicology of similar products.

- · 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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.
- · 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

Please contact your waste disposer for the exact waste code.

08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances

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

OFOTION			
SECTION	14: Transp	ort intorn	nation
SECTION			

· 14.1 UN-Number · ADR, IMDG, IATA	UN1133
· 14.2 UN proper shipping name · ADR · IMDG	1133 ADHESIVES, ENVIRONMENTALLY HAZARDOUS ADHESIVES (CYCLOHEXANE, tris(nonylphenyl) phosphite), MARINE POLLUTANT
· IATA	ADHESIVES

- · 14.3 Transport hazard class(es)
- · ADR



· Class · Label 3 (F1) Flammable liquids.

3

· IMDG



· Class 3 Flammable liquids.

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Label	(Contd. of page 7
IATA	
Class Label	3 Flammable liquids. 3
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	Product contains environmentally hazardous substances: cyclohexane Yes
Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category	Warning: Flammable liquids. - F-E,S-D A
14.7 Transport in bulk according to Annex II and the IBC Code	of Marpol Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category Tunnel restriction code Remarks:	The product is, based on the viscosity, classified in accordance with ADR, Part 2, Chapter 2.2, Paragraph 2.2.3.1.4
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml
Remarks:	Maximum net quantity per outer packaging: 1000 ml The product is, based on the viscosity, classified in accordance with IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.
UN "Model Regulation":	UN 1133 ADHESIVES, 3, III, ENVIRONMENTALLY

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 57
- · National regulations:

Class	Share in %
1	2.5-10
NK	10-25

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- · 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.

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

H225 Highly flammable liquid and vapour.

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.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

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.

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) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Resp. Sens. 1: Respiratory sensitisation – Category 1 Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity - Category 2

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 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Sources

Classification corresponds to the current lists of the EEC, is supplemented with data from publications and data from the

* Data compared to the previous version altered.