

RENOLIT ALKORPLUS 81040


SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH) & 1272/2008 (CLP)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
Product Name: **RENOLIT ALKORPLUS**
Product Code: **RENOLIT ALKORPLUS 81040**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified use(s): Contact adhesive. Industrial use, Professional use.
- 1.3 Details of the supplier of the safety data sheet**
Company Identification: RENOLIT Belgium NV
Industriepark De Bruwaan 43
B-9700 Oudenaarde
Belgium
- Telephone: +32 5533 9711
Fax: +32 5531 9650
E-Mail (competent person): renolit.belgium@renolit.com
- 1.4 Emergency telephone number**
Emergency Phone No. (24 h): +44 (0)1235 239 670 (24 hours, 7 days)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
According to Regulation (EC) No. 1272/2008 (CLP)
Flam. Liq. 2; H225
Eye Irrit. 2; H319
Repr. 2; H361d
STOT SE 3; H336
EUH066
- According to Directive 67/548/EEC & Directive 1999/45/EC
F; R11
Xi; R36
Repr. Cat. 3; R63
R66, R67
- 2.2 Label elements**
According to Regulation (EC) No. 1272/2008 (CLP)
- Hazard pictogram(s):

- Signal word(s): Danger
- Hazard statement(s):
H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H361d: Suspected of damaging the unborn child.

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Precautionary statement(s): P210: Keep away from heat, sparks, open flame, hot surfaces - No smoking.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P243: Take precautionary measures against static discharge.
 P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Information: EUH066: Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

Vapour may create explosive atmosphere. The vapour is heavier than air; beware of pits and confined spaces.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard symbol(s) and hazard statement(s)
Ethyl acetate	20-30	141-78-6	205-500-4	-	H225, H319, H336, EUH019
Toluene	1-10	108-88-3	203-625-9	-	H225, H362d, H304, H373, H315, H336
Butan-2-one / methyl ethyl ketone	30-40	78-93-3	201-159-0	-	H319

EC Classification No. 67/548/EC

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Risk Phrases and Safety Phrases
Ethyl acetate	20-30	141-78-6	205-500-4	-	R11, R36, R66, R67
Toluene 1-10		108-88-3	203-625-9	-	R11, R38, R48/20, R63, R65, R67
Butan-2-one / methyl ethyl ketone	30-40	78-93-3	201-159-0	-	R11, R36, R66, R67

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation:

Remove patient from exposure, keep warm and at rest. If symptoms persist, obtain medical attention.

Skin Contact:

Remove contaminated clothing immediately and drench affected skin with plenty of water, then wash with soap and water. If symptoms persist, obtain medical attention. Contaminated clothing should be thoroughly cleaned.

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Eye Contact:	If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.
Ingestion:	Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain medical attention.
4.2 Most important symptoms and effects, both acute and delayed	Irritating to eyes. Repeated and/or prolonged skin contact may cause irritation. May cause irritation to the respiratory system. Vapours may cause drowsiness and dizziness. Nausea. Headache. Unconsciousness.
4.3 Indication of the immediate medical attention and special treatment needed	If breathing is laboured, oxygen should be administered by qualified personnel.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media	
Suitable Extinguishing Media:	Water spray, foam, dry powder or CO ₂
Unsuitable Extinguishing Media:	Do not use water jet.
5.2 Special hazards arising from the substance or mixture	Vapour may create explosive atmosphere. The vapour is heavier than air; beware of pits and confined spaces. May give off toxic fumes in a fire. Carbon monoxide, Carbon dioxide. Ethanol. acetic acid vapours.
5.3 Advice for fire-fighters	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep fire exposed containers cool by spraying with water. Flash Point (°C): -17 Flammable Limits (Lower) (%v/v): 1.9 Flammable Limits (Upper) (%v/v): 10.2 Auto Ignition Temperature (°C): 480-522

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Eliminate sources of ignition. Vapour may create explosive atmosphere. The vapour is heavier than air; beware of pits and confined spaces. Ensure adequate ventilation. Use non-sparking hand tools and explosion proof electrical equipment. Take precautionary measures against static discharges. Avoid inhalation of vapours. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves. (See Section: 8). Contaminated clothing should be thoroughly cleaned.
6.2 Environmental precautions	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

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- 6.3 Methods and material for containment and cleaning up** Adsorb spillages onto sand, earth or any suitable adsorbent material. Sweep up carefully with non-sparking tools. Transfer to a container for disposal. Wash spill area with soapy water. Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorised waste disposal contractor.
- 6.4 Reference to other sections** Personal Protection: See Section: 8.
- Other advice** None.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Eliminate sources of ignition. Vapour may create explosive atmosphere. The vapour is heavier than air; be aware of pits and confined spaces. Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Use non-sparking hand tools and explosion proof electrical equipment. Take precautionary measures against static discharges.
- Avoid inhalation of vapours. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves. (See Section: 8).
- Do not eat, drink or smoke at the work place. Wash hands and exposed skin after use. Contaminated clothing should be thoroughly cleaned.
Handling: 15-25 °C.
- 7.2 Conditions for safe storage, including any incompatibilities** Keep away from heat and sources of ignition. Keep from direct sunlight. Keep away from frost. Keep only in the original container in a cool, well-ventilated place.
Storage temperature (°C): 10-20
- 7.3 Specific end use(s)** Contact adhesive. Industrial use, Professional use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ethyl acetate CAS No.: 141-78-6	Exposure limit values	Source/ Note:
USA	400 ppm (8-hr TWA)	TLV
France:	400 ppm, 1400 mg/m ³ (VME)	INRS
Germany: 400	ml/m ³ , 1500 mg/m ³ (exposure factor 2, 15 minutes, 4/1h)	MAK-COMMISSION
Denmark:	150 ppm; 540 mg/m ³ WEA	
Spain :	400 ppm, 1.460 mg/m ³ (VLA-ED)	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS
United Kingdom:	200 mg/m ³ (8-hr TWA) 400 mg/m ³ (15 minutes; STEL)	EH40 – UK Occupational Exposure Limits

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Toluene CAS No.: 108-88-3	Exposure limit values	Source/ Note:
EU	50 ppm, 192 mg/m ³ (8-hr TWA) 100 ppm, 384 mg/m ³ (15 minutes; STEL)	2006/15/EC
USA	50 ppm (8-hr TWA)	TLV
France:	50 ppm, 192 mg/m ³ (VME) 50 ppm, 192 mg/m ³ (VLCT (ou VLE))	INRS
Germany: 50	ml/m ³ , 1900 mg/m ³ (exposure factor 2, 15 minutes,4/1h)	MAK-COMMISSION
Denmark:	25 ppm; 94 mg/m ³ WEA/	H
Spain :	50 ppm, 192 mg/m ³ (VLA-ED) 100 ppm, 384 mg/m ³ (VLA-EC)	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS/ vía dérmica, VLB ® , VLI,r
United Kingdom:	50 ppm, 191 mg/m ³ (8-hr TWA) 100 ppm, 384 mg/m ³ (15 minutes; STEL)	EH40 – UK Occupational Exposure Limits
Butan-2-one / methyl ethyl ketone CAS No.: 78-93-3	Exposure limit values	Source/ Note:
EU	200 ppm, 600 mg/m ³ (8-hr TWA) 300 ppm, 899 mg/m ³ (15 minutes; STEL)	2000/39/EG
USA	50 ppm (8-hr TWA)	TLV
France:	200 ppm, 600 mg/m ³ (VME) 300 ppm, 900 mg/m ³ (VLCT (ou VLE))	INRS
Germany: 200	ml/m ³ , 600 mg/m ³ (exposure factor 2, 15 minutes,4/1h)	MAK-COMMISSION
Denmark:	50 ppm; 145 mg/m ³ WEA/	H
Spain :	200 ppm, 600 mg/m ³ (VLA-ED) 300 ppm, 900 mg/m ³ (VLA-EC)	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS/ VLB ® , VLI
United Kingdom:	200 ppm, 600 mg/m ³ (8-hr TWA) 300 ppm, 899 mg/m ³ (15 minutes; STEL)	EH40 – UK Occupational Exposure Limits/ SK, BMGV

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded.

8.2.2 Personal Protection

E eye/face protection

Goggles giving complete protection to eyes. (EN 166)



Skin protection

Protective gloves. (EN 374)



Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. (EN 141)



Other:

Apron or other light protective clothing, boots and plastic or rubber gloves.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid.
Colour:	White.
Odour:	Ester-like.
Melting Point (°C) / Freezing Point (°C):	No information available.
Boiling Point (°C):	75-100
Flash Point (°C):	-17
Flammable Limits (Lower) (%v/v):	1.9
Flammable Limits (Upper) (%v/v):	10.2
Auto Ignition Temperature (°C):	480-522
Vapour Pressure (Pascal):	10,330
Vapour Density (Air=1):	>2.4
Specific Gravity:	0.85-0.95
Solubility (Water):	Immiscible.
Partition coefficient (n-Octanol/water):	log Pow = 0.26 - 0.69
Viscosity (mPa.s):	2500

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	No information available.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No information available.
10.4 Conditions to avoid	Keep away from heat, sources of ignition and direct sunlight.
10.5 Incompatible materials	Oxidising agents.
10.6 Hazardous Decomposition Product(s)	May give off toxic fumes in a fire. Carbon monoxide, Carbon dioxide. Ethanol. acetic acid vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Ingestion:	LD50 (oral/rat): 4935 mg/kg (Ethyl acetate) LD50 (oral/rat): 2737 mg/kg (Butan-2-one / methyl ethyl ketone)
Inhalation: LD	LD ₅₀ (inhalation/rat): 1600 mg/l/4h (Ethyl acetate) LD ₅₀ (inhalation/rat): 34 mg/l/4h (Butan-2-one / methyl ethyl ketone)
Skin Contact:	LD ₅₀ (dermal/rabbit): 6480mg/kg (Butan-2-one / methyl ethyl ketone)
Eye Contact:	No information available.
skin corrosion/irritation:	Repeated and/or prolonged skin contact may cause irritation.
Serious eye damage/irritation:	Irritating to eyes.
respiratory or skin sensitization:	It is not a skin sensitiser.
Mutagenicity:	There is no evidence of mutagenic potential.
Carcinogenicity:	No evidence of carcinogenicity.
Reproductive toxicity:	Category 2: Suspected of damaging the unborn child.
STOT-single exposure:	Category 3: May cause drowsiness or dizziness.
STOT-repeated exposure:	Not classified.
Aspiration hazard:	Not classified.
Other information:	No information available.

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Butan-2-one / methyl ethyl ketone: LC ₅₀ (Fathead minnow (<i>Pimephales promelas</i>)): 32,200 mg/l 96h EC ₅₀ (<i>Daphnia magna</i>): 5,091 mg/l/48h EC ₅₀ (Algae): 120 mg/l/72h WGK: 1. log Pow = 0.26 - 0.69 BSB: 1.92 g O ₂ /g Chemical Oxygen Demand (COD): 2.31 g O ₂ /g
12.2 Persistence and degradability	No information available.
12.3 Bioaccumulative potential	No information available.
12.4 Mobility in soil	No information available.
12.5 Results of PBT and vPvB assessment	No information available.
12.6 Other adverse effects	No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Do not empty into drains; dispose of this material and its container in a safe way. To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.
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SECTION 14: TRANSPORT INFORMATION

14.1 UN number	1133
14.2 Proper Shipping Name	Adhesives.
14.3 Transport hazard class(es)	3
14.4 Packing Group	II
14.5 Environmental hazards	Not classified as a Marine Pollutant.
14.6 Special precautions for user	Vapour may create explosive atmosphere. The vapour is heavier than air; beware of pits and confined spaces.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	-

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006, Regulation (EC) No. 1272/2008 (CLP), Directive 67/548/EEC & Directive 1999/45/EC.
15.1 Chemical Safety Assessment	-

SECTION 16: OTHER INFORMATION

Full text of Hazard statements and Risk phrases for pure substances listed in section 3.

Revision: 002

Date of Issue: 24 June 2011

The following sections contain revisions or new statements: All sections.

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Hazard Symbol:

H225: Highly flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H362: May cause harm to breast-fed children.
H373: May cause damage to organs through prolonged or repeated exposure.
EUH019: May form explosive peroxides.

Risk Phrases:

R11: Highly flammable.
R36: Irritating to eyes.
R38: Irritating to skin.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R63: Possible risk of harm to the unborn child.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.

The following sections contain revisions or new statements: 1-16.

Abbreviations:

CAS = Chemical Abstracts Service;
CNS = Central Nervous System;
EINECS = European Inventory of Existing Commercial Chemical Substances;
EC50 = Effective Concentration 50%;
IARC = International Agency for Research on Cancer;
IC50 = Inhibitory Concentration 50%;
LC50 = Lethal Concentration 50%;
LD50 = Lethal Dose 50%;
LTEL = Long Term Exposure Limit;
STEL = Short Term Exposure Limit;
TWA = Time Weighted Average;

References:

IUCLID Chemical Data Sheets, IUCLID Export Files, OECD-IUCLID Export Files, EUSES Export Files,