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

1.1. Product identifier

GermanBond CLR

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Solvents/Thinner

Uses advised against

for professional use only

1.3. Details of the supplier of the safety data sheet

Company name:	germanBelt GmbH	
Street:	Carl-Vollrath-Str. 8	
Place:	D-07422 Bad Blankenburg	
Telephone: e-mail:	+49 (0)36741 / 5680-0 sales@germanbelt.de	Telefax: +49 (0)36741 / 5680-70
<u>1.4. Emergency telephone</u> number:	Giftnotruf England: +44 (171) 635 9 91, Giftnotruf Norwegen: +47 (22) 5	1 91, Giftnotruf England: +44 (171) 635 91 91 300,

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Flammable liquid: Flam. Liq. 2 Skin corrosion/irritation: Skin Irrit. 2 Serious eye damage/eye irritation: Eye Irrit. 2 Specific target organ toxicity - single exposure: STOT SE 3 Aspiration hazard: Asp. Tox. 1 Hazardous to the aquatic environment: Aquatic Chronic 1 Hazard Statements: Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes serious eye irritation. Causes skin irritation. May cause drowsiness or dizziness. Very toxic to aquatic life with long lasting effects.

Danger

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

cyclohexane, Ethyl acetate

Signal word: **Pictograms:**



Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.



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H336	May cause drowsiness or dizziness.	
H410	Very toxic to aquatic life with long lasting effects.	
Precautionary statemer	nts	
P331	Do NOT induce vomiting.	
P403+P235	Store in a well-ventilated place. Keep cool.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with wate or shower.	r
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P273	Avoid release to the environment.	
P243	Take action to prevent static discharges.	
P240	Ground and bond container and receiving equipment.	
P233	Keep container tightly closed.	
P210	Keep away from heat. No Smoking.	
Special labelling of cert	tain mixtures	
EUH066	Repeated exposure may cause skin dryness or cracking. Restricted to professional users.	

No longer be emitted from packaging size> 350 g to the general public. For package size <= 350 g Additional marking: "This product may not'll processed under conditions of poor ventilation." and "This product must not be used for bonding carpets."

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization Solvent mixture

Hazardous components

CAS No	Chemical name	Quantity			
	EC No	Index No	REACH No		
	Classification according				
141-78-6	ethyl acetate				
	205-500-4	607-022-00-5	01-2119475103-46		
	Flam. Liq. 2, Eye Irrit. 2	, STOT SE 3; H225 H319 H336 EUH0	66		
110-82-7	cyclohexane	25 - 50 %			
	203-806-2	601-017-00-1	01-2119463273-41		
	Flam. Liq. 2, Skin Irrit. 2 H315 H336 H304 H400				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down. Transport affected person in lying position, in case of shortness of breath in half-sitting position. Remove contaminated, saturated clothing immediately. Call a physician immediately.



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After inhalation

In case of respiratory tract irritation, consult a physician. Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

In case of skin irritation, consult a physician. IF INHALED: May cause drowsiness or dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Aspiration hazard, Subsequent observance for pneumonia and lung oedema., Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water mist, Foam, Carbon dioxide (CO2), Water spray, Sand

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO2), In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Vapours are heavier than air, spread along floors and form explosive mixtures with air., Wear personal protection equipment (refer to section 8)., Provide adequate ventilation.

6.2. Environmental precautions

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.



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Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking., Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Take precautionary measures against static discharges.

Further information on handling

Splashproof grounded devices

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. storage temperature: <= 20°C

Advice on storage compatibility

Do not store together with: Food and feedingstuffs, Oxidising agent

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL



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DNEL/DMEL values

CAS No	Substance			
DNEL type	•	Exposure route	Effect	Value
141-78-6	ethyl acetate			
Worker DNEL,	acute	inhalation	local	1468 mg/m ³
Worker DNEL,	long-term	inhalation	local	734 mg/m ³
Consumer DNI	EL, acute	inhalation	local	734 mg/m ³
Worker DNEL,	long-term	dermal		63 mg/kg bw/day
Consumer DNI	EL, long-term	dermal		37 mg/kg bw/day
Consumer DNI	EL, long-term	inhalation	local	367 mg/m³
Consumer DNI	EL, long-term	oral		4,5 mg/kg bw/day
110-82-7	cyclohexane			
Consumer DNI	EL, long-term	oral	systemic	59,4 mg/kg bw/day
Worker DNEL,	long-term	dermal	systemic	2016 mg/kg bw/day
Worker DNEL,	long-term	inhalation	systemic	700 mg/m³
Consumer DNI	EL, long-term	dermal	systemic	1186 mg/kg bw/day
Worker DNEL,	long-term	inhalation	local	700 mg/m³
Consumer DNI	EL, acute	inhalation	systemic	412 mg/m ³
Consumer DNI	EL, acute	inhalation	local	412 mg/m ³
Consumer DNI	EL, long-term	inhalation	local	206 mg/m ³
Consumer DNI	EL, long-term	inhalation	systemic	206 mg/m ³
Worker DNEL,	acute	inhalation	local	700 mg/m ³
Worker DNEL, acute		inhalation	systemic	700 mg/m³
PNEC values				

CAS No	Substance	
Environmental compartment		Value
141-78-6	ethyl acetate	
Freshwater		0,26 mg/l
Marine wate	r	0,026 mg/l
Freshwater s	sediment	0,34 mg/kg
Marine sediment		0,034 mg/kg
Soil		0,22 mg/kg
110-82-7	cyclohexane	
Freshwater		0,207 mg/l
Marine water		0,207 mg/l
Micro-organisms in sewage treatment plants (STP)		3,24 mg/l
Soil		2,99 mg/kg

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.



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Protective and hygiene measures

When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Suitable material: FKM (fluoro rubber), NBR (Nitrile rubber), Thickness of the glove material: 0,35 - 0,4 mm, Breakthrough time (maximum wearing time): >= 8 h, Unsuitable material: PVC (polyvinyl chloride), CR (polychloroprene, chloroprene rubber)

Skin protection

Wear suitable protective clothing.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values, Filtering device (full mask or mouthpiece) with filter: A

Environmental exposure controls

Discharge into the environment must be avoided. Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour:	Liquid colourless, clear ester	
Changes in the physical state Initial boiling point and boiling range:		77 - 82 °C
Flash point:		- 11 °C
Lower explosion limits: Upper explosion limits:		1 vol. % 12,8 vol. %
Density (at 20 °C):		0,83 g/cm³

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidising agent

10.6. Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects



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Acute toxicity

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
141-78-6	ethyl acetate							
	oral	LD50 mg/kg	5600	Rat				
	dermal	LD50 mg/kg	18000	Rabbit				
	inhalative vapour	LC50	58 mg/l	Rat				
110-82-7	cyclohexane							
	oral	LD50 mg/kg	> 5000	Rat	OECD 401			
	dermal	LD50 mg/kg	> 2000	Rabbit	OECD 402			
	inhalative (4 h) vapour	LC50 mg/l	> 32,88	Rat	OECD 403			

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
141-78-6	ethyl acetate						
	Acute fish toxicity	LC50	230 mg/l		Pimephales promelas (fathead minnow)		
	Acute crustacea toxicity	EC50	717 mg/l		Daphnia magna (Big water flea)		
	Fish toxicity	NOEC mg/l	< 9,65		Promephales promelas		
110-82-7	cyclohexane						
	Acute fish toxicity	LC50 mg/l	4,53	96 h	Fisch	OECD 203	
	Acute crustacea toxicity	EC50	2,4 mg/l		Daphnia magna (Big water flea)	OECD 202	
	Algea toxicity	NOEC mg/l	0,94		Algen	OECD 201	

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
141-78-6	ethyl acetate			
	OECD 301 D	79 %	20	
110-82-7	cyclohexane			
	OECD 301 F	77 %	28	

12.3. Bioaccumulative potential



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CAS No	Chemical name	BCF	Species	Source
141-78-6	ethyl acetate	30		
110-82-7	cyclohexane	167		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

080409

Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethyl acetate, cyclohexane)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Special Provisions:	274 601 640D
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethyl acetate, cyclohexane)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Special Provisions:	274 601 640D



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Limited quantity:	1 L	
Excepted quantity:	E2	
Marine transport (IMDG)		
<u>14.1. UN number:</u>	UN 1993	
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethyl acetate, cyclohexane)	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	II	
Hazard label:	3	
Marine pollutant:	yes	
Special Provisions:	274	
Limited quantity:	1L	
Excepted quantity: EmS:	E2 F-E, S-E	
Air transport (ICAO-TI/IATA-DGR)	Г-Е, 3- Е	
• • • •	101 4000	
14.1. UN number:	UN 1993	
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethyl acetate, cyclohexane)	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	Ш	
Hazard label:	3	
Special Provisions:	A3	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y341	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:	353	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	364 60 L	
<u>14.5. Environmental hazards</u>	00 L	
ENVIRONMENTALLY HAZARDOUS:	yes ¥	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information		
Restrictions on use (REACH, annex XVII):		
Entry 57: cyclohexane		
2010/75/EU (VOC):	100 % (830 g/l)	
2004/42/EC (VOC):	100 % (830 g/l)	



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Information according to 2012/18/EU (SEVESO III):	E1 Hazardous to the Aquatic Environment		
Additional information: Additional information REACH, Anhang XVII, Nr. 3, Nr. 40, Nr.	P5c 57		
National regulatory information			
Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juveni work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.		
Water contaminating class (D):	2 - clearly water contaminating		

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 15,16.

Relevant H and EUH statements (number and full text)

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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)