

Trade name: Retention glue**Safety data sheet in accordance with (EG) Nr. 1907 / 2006**

Date of printing : 10.12.2010

01. Identification

Product details	
Trade name	Retention glue
Application of the material / of the formulation	

Identification of the manufacturer	
Address	ERKODENT Erich Kopp GmbH, Siemensstr. 3, D-72285 Pfalzgrafenweiler
Information provided by	Chemie
Telephone number	Tel.: (+49) (0) 7445 / 85 01 - 0, Fax: (+49) (0) 7445 / 20 92, e-mail: w.heuchert@erkodent.com
Emergency telephone number :	

02. Hazards possibilities

Hazard designation	Harmful
Particular information pertaining specific risk for human / environment	Harmful if swallowed., May cause cancer.

03. Composition/information on ingredients

Chemical characterization	Solution Acrylpolymer					
Substance / product identification						
Hazardous ingredients						
		CAS no.	EINECS no.	%	Hazard symbols	R phrases
	Dichlormethan	75-09-2	----	30 – 40	Xn	40
	Nitromethan	75-52-5	----	15 – 40	Xn	5, 10, 22
	2-Phenoxyethanol	122-99-6	----	5 – 10	Xn	22, 36
	Ethanol	64-17-5	----	1 – 5	F	11
Additional information	-					

04. First aid measures

General Information	Remove contaminated clothing immediately and dispose of safely., By continuous complaints consult a physician.
First aid measures / inhalation.	Ensure supply of fresh air., Remove the casualty into fresh air and keep him calm., In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice.
First aid measures / skin contact.	In case of contact with skin wash off immediately with soap and water., Don't use solvents.
First aid measures / eye contact.	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water., Seek medical aid immediately.
First aid measures / ingestion..	Do not induce vomiting., Take medical treatment.
Advice to doctor	If individual is drowsy or unconscious place in recovery position (on left side, with head down)., Provide for body rest, protect against loss of heat.

05. Fire-fighting measures

Suitable extinguishing media	alcohol-resistant foam, dry powder, carbon dioxide.
Extinguishing media that must not be used for safety reasons	Full water jet
Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases.	Risk of formation of toxic pyrolysis products.
Special protective equipment for firefighting	In case of combustion use a suitable breathing apparatus.
Additional informations (chapter 5)	Collect contaminated firefighting water separately,

must not be discharged into the drains.

06. Accidental release measures

personal precautions.	Ensure adequate ventilation., Keep away sources of ignition., Refer to protective measures listed in sections 7 and 8.
environmental precautions.	Do not allow to enter drains.
methods for cleaning up/taking up.	Take up with absorbent material (eg sand, kieselguhr, universal binder)., Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.
Additional informations (chapter 6).	Dispose of absorbed material in accordance with the regulations.

07. Handling and storage

Handling	
Hints on safe handling.	Open and handle container with care., Provide good ventilation of working area (local exhaust ventilation if necessary)., Observe the usual precautions for handling chemicals.
Hints for protection against fire and explosion.	Keep away from sources of ignition - refrain from smoking.

Storage	
Requirements for storage rooms and vessels.	Store product in closed containers., Store always in containers, which comply with the original packing.
Hints on storage assembly.	Do not store with acids or alkalies., Do not store with strong oxidizing agents.
. Further information on storage conditions.	Keep container tightly closed; open and handle with care., Protect from heat and direct sunlight.
Storage category	-
Storage stability	-
Recommended storage temperature	15 – 25 °C

08. Exposure controls/personal protection

Additional hints on technical system design.	
Ingredients with occupational exposure limits to be monitored	Dichlormethan 75-09-2; MAK 350 mg/m ³ , 100 ml/m ³ ; Nitromethan 75-52-5; MAK 250 mg/m ³ , 100 ml/m ³ Ethanol 64-17-5; MAK 1900 mg/m ³ , 1000 ml/m ³ Chlorwasserstoff 7647-01-0; MAK 15 mg/m ³ , 10 ml/m ³ Carbonylchlorid 75-44-5; MAK 0,4 mg/m ³ , 0,1 ml/m ³

Personal protective equipment <input type="checkbox"/> Personal protective equipment <input type="checkbox"/> Persönliche Schutzausrüstung	
Respiratory protection	Breathing apparatus in the event of high concentrations., Short term: filter apparatus, filter AX
Hand protection	Protective gloves Viton
Eye protection	tightly fitting safety glasses
Skin protection	light protective clothing
General protective and hygiene measures	Do not inhale vapours., Avoid contact with eyes and skin., Do not eat, drink or smoke during work time., Observe the usual precautions when handling chemicals.

09. Physical and chemical properties

Appearance.	
Form	Liquid
Colour	colourless, clear
Odour	sweetish, chloroform-like

Safety data			
Changes in physical state			
Boiling point	Ca. 40	°C	1013 hPa
Flash point			
	n.a.	°C	
Ignition temperature			
	Ca. 605	°C	Dichlormethan
	Ca. 418		Nitromethan
self ignition			
explosion limits	13	Vol %	Dichlormethan
	7,1	Vol %	Nitromethan
Upper explosion limit	22	Vol %	Dichlormethan
	63	Vol %	Nitromethan
Vapour pressure			
	475	hPa 20°C	Dichlormethan
	35	hPa 20°C	Nitromethan
Density			
	1,21	g/cm3	20 °C
Solubility in water			
	13,7	g/l 20°C	Dichlormethan
	95	g/l 20°C	Nitromethan
Soluble in			
	-	g/l	
pH-Value			
	n.b.		
Viscosity			
	750 - 1000	mPas	20 °C
Other information (chapter 9.)		-	

10. Stability and reactivity

Hazardous reactions	Reactions with acids, alkalies and oxidizing agents., Reactions with various metals., Reactions with earth alkali metals., Reactions with alkali metals.
Hazardous decomposition products	Hydrogen chloride (HCl), Phosgene, Irritant gases/vapours
Thermal decomposition	No decomposition if used as prescribed.
Additional informations (chapter 10)	-

11. Toxicologic indications

Acute toxicity	
Acute oral toxicity	LD50 rat 1600 mg/kg Dichlormethan LD50 rat 1210 mg/kg Nitromethan LD50 rat 1250 mg/kg Phenoxxyethanol
Acute dermal toxicity	LD50 Rabbits > 2000 mg/kg Nitromethan
Acute inhalational toxicity	LC50 rat 52 mg/l Dichlormethan LC50 rat 12,7 mg/l Nitromethan
Irritant/corrosive effects	
Irritant effect on skin	irritant,Has a degreasing effect on the skin.
Irritant effect on eyes	irritant - risk of serious damage to eyes
Sensitization	
Effects after repeated or prolonged exposition (subacute, subchronic, cronic)	mouse NOAEL 94 ppm inhalativ
Other information (chapter 11.)	-
Experiences made in practice.	-
General remarks.	Inhalation of the vapours causes irritation of the respiratory tract and mucous membrane, headaches,

	nausea, giddiners, vomiting., Irritating effects on the skin and mucous membrane., Kidney damage is possible., Liver damage is possible.
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12. Environmental indications

Data on elimination (persistence and degradability) :	
Physico-chemical eliminability	-
Biodegradability	not readily degradable 5-26% Dichlormethan

Behaviour in environment compartments.	-
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Ecotoxic effect	
Fish toxicity	LC50 Pimephales promelas 193 mg/l LC50 Guppy 294 mg/l Dichlormethan Value taken from the literature
Daphnia toxicity	EC50 Daphnia magna >200 mg/l Dichlormethan Value taken from the literature
Algae toxicity	EC0 Scenedastrum quadricauda 125 mg/l IC50 Selenastrum capricomutum > 662 mg/l Value taken from the literature
Bacteria toxicity	NOEC Pseudomonas putida 500 mg/l Dichlormethan Value taken from the literature

Further ecological information	Do not allow to enter soil, waterways or waste water canal.
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Result of the evaluation of PBT characteristics	
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13. Disposal considerations

Disposal considerations	
Disposal / product	-
Disposal / contaminated packagings.	Completely emptied packagings can be given for recycling.

Waste code no. / name of waste (for Germany only)	080409 The stated Waste Code Number(s) according to the European Waste Catalogue (EAK) is (are) considered as a recommendation. A definite setting (establishment) should be carried out in co-ordination with the Regional Waste Disposal Authority.
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14. Transport information

Land transport ADR/RID	
Class	6.1
Number/letter	-
Hazard number (Kemler-number)	
UN number	2810
Technical name	2810 Giftiger organischer flüssiger Stoff (enthält Dichlormethan)
Remarks	VG/PG: III

Inland waterways transport ADN/ADNR	
Class	6.1
Number/letter	-
Category	-
Technical name	UN 2810 Giftiger organischer flüssiger Stoff (enthält Dichlormethan)
Remarks	PG/VG: III

Marine transport IMDG/GGVSee	
Class	6.1
UN number	2810
page	-
EmS	F-A, S-A
MFAG	-
MARINE POLUTANT	0
Correct technical name	2810 Toxic liquid, organic, (containing dichlormethane)
Remarks	PG/VG: III

Air transport ICAO/IATA	
Class	6.1
UN number	2810
page	-
Correct technical name	2810 Toxic liquid, organic, (containing dichlormethane)
Remarks	PG/VG: III

Other information (chapter 14.)	-
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15. Regulatory information

Labelling in accordance with GefStoffV/EC	
The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.	

Hazard symbols	Xn	Harmful
TA-Luft / components		Dichlormethan Nitromethan

R phrases	R 22	Harmful if swallowed.
	R 40	Possible risks of irreversible effects.

S phrases	S 23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
	S 24/25	Avoid contact with skin and eyes.
	S 36/37	Wear suitable protective clothing and gloves.
	S 41	In case of fire and/or explosion do not breathe fumes.

Other regulations	
Restriction of occupation.	§ 15a GefStoffV § 22 ArbStoffG §§ 4 u. 5 MuSchRiV
Decree for case of interference / remarks (for Germany only).	-
Classification according to VbF / remarks (for Germany only).	n.a.
TA-Luft (Ger.)	Class: 1,5.2.5
Water Hazard Class (Ger.)	2 (VwVwS, Anh. 4)
Other regulations, restrictions and prohibition regulations (for Germany only)	-
Securityevaluation++Stoffsicherheitsbeurteilung	

16. Other information (chapter 16.).

BG Data sheet M 023 „Polyester- and Epoxy-Resins“ (n.a. = Not applicable; n.b.= not determined)
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This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.