Revision: 23.12.2014

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Safety data sheet
                                      according to 1907/2006/EC, Article 31
            the Waterproof Solution
Printing date 25.04.2015
                                                       Version: 7
   SECTION 1: Identification of the substance/mixture and of the company/undertaking
  · 1.1 Product identifier
  · Trade name: Hertalan ks137
  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:
    Carlisle Construction Materials BV
    Industrieweg 16
    NL 8263 AD Kampen
    Tel: 0031 (0) 38 339 33 33
    Fax: 0031 (0) 38 339 33 34
    e-mail: info@hertalan.com - Internet: www.hertalan.com
   · Further information obtainable from: Product Safety Department: qesh.nl@ccm-europe.com
   1.4 Emergency telephone number: NVIC-Nederland. Tel: +31-30-2748888 (only medical personnel)
   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.
             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.
   STOT SE 3
                      H336 May cause drowsiness or dizziness.
  · 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
              GHS07
     GHS02
                         GHS09
  · Signal word Danger
   · Hazard-determining components of labelling:
   Naphtha (petroleum), hydrotreated light
   · Hazard statements
   H225 Highly flammable liquid and vapour.
   H315 Causes skin irritation.
   H319 Causes serious eye irritation.
   H336 May cause drowsiness or dizziness.
   H411 Toxic to aquatic life with long lasting effects.

    Precautionary statements

                      Wear protective gloves / eye protection.
   P280
   P210
                      Keep away from open flames. - No smoking.
                                                                                                         (Contd. on page 2)
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P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
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 or doctor/physician if you feel unwell	

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

P402+F404 Store III a dry place. Store III a closed con

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

· Additional Information:

Contains zinc bis(dibutyldithiocarbamate). 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 components:				
CAS: 64742-49-0 EINECS: 265-151-9	Naphtha (petroleum), hydrotreated light Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	25-50%		
CAS: 110-82-7 EINECS: 203-806-2	cyclohexane Flam. Liq. 2, H225;	10-25%		
CAS: 78-93-3 EINECS: 201-159-0	butanone 🚸 Flam. Liq. 2, H225; 🚸 Eye Irrit. 2, H319; STOT SE 3, H336	10-25%		
CAS: 136-23-2 EINECS: 205-232-8	zinc bis(dibutyldithiocarbamate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	< 2.5%		

Additional information:

"Naphtha" classified and marked in accordance with EU Directives RL 67/548/EWG, Note P.[contents benzene (CAS: 71-43-2) <0,1% by weight]

For the wording of the listed risk 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.

If the casualty is not breathing: Perform mouth-to-mouth or mouth-to-nose resuscitation, notify emergency physician immediately

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing:

Rinse mouth with water.

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: 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)

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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). 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.

· 8.1 Control parameters

· Ingre	Ingredients with limit values that require monitoring at the workplace:		
110-82-7 cyclohexane			
WEL	WEL Short-term value: 1050 mg/m³, 300 ppm Long-term value: 350 mg/m³, 100 ppm		
78-93-3 butanone			
WEL	Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Sk, BMGV		

Ingredients with biological limit values:

78-93-3 butanone

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BMGV	70 µmol/L
	Medium: urine
	Sampling time: post shift
	Parameter: butan-2-one
· Additio	nal information: The lists valid during the making were used as basis.
	osure controls al protective equipment:
	I protective and hygienic measures:
	high-quality protective equipment during operations such as grinding, drilling and/or sawing
	ask FFP3 (Filtering Facepiece Partikel) (EN 149: 2001)
	(grinding) (EN388 (4.1.3.1))
	glasses (EN166-168, 170)
	protection (EN352-2)
	n clean contaminated clothing. Do not blow or brush off contamination.
	rotective clothing separately.
The us	al precautionary measures are to be adhered to when handling chemicals.
	way from foodstuffs, beverages and feed.
	ately remove all soiled and contaminated clothing
	ands before breaks and at the end of work.
	inhale gases / fumes / aerosols.
	ontact with the eyes and skin.
	carry product impregnated cleaning cloths in trouser pockets. Atory protection:
	table respiratory protective device in case of insufficient ventilation.
	content of the inhalation air must be sufficient i.e. > 17%
	of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-
	ed respiratory protective device.
	XP3(EN371)
	tion of hands:
m	
111.5	Protective gloves
Duted a	bbar aloves (EN274 EN289:4101)
	bber gloves(EN374, EN388:4101). tion EN374 3: 2002 (minutes) > 480 minutes
Selecti	ntion EN374-3: 2003 (minutes)> 480 minutes In of the glove material on consideration of the penetration times, rates of diffusion and the degradation
	learing protective gloves cotton single-use undergloves are recommendable. However, these undergloves must
be disc	arded after each use to avoid potential exposure to absorbed product.
	l of gloves
	ection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies
from m	anufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove
	I can not be calculated in advance and has therefore to be checked prior to the application.
	ation time of glove material
	act break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
	permanent contact gloves made of the following materials are suitable: Butyl rubber, BR
	ntact of maximum 15 minutes, gloves made of the following materials are suitable: Butyl rubber, BR
· Eye pr	ptection:
	Tightly sealed goggles
	righty coulou goggioo
Safety	glasses(EN166)
	rotection: Protective work clothing(EN 340, 463, 468, 943-1, 943-2)
0505	
SECT	ON 9: Physical and chemical properties
· 9 1 Infe	ormation on basic physical and chemical properties
	I Information

- General Information on Se Appearance: Form: Colour:

Fluid

Black

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· Odour:	Characteristic
· pH-value:	Not applicable.
 Change in condition Boiling point/Boiling range 	: 60 °C
Flash point:	-19 °C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits: Lower: Upper:	1.3 Vol % 11.5 Vol %
Vapour pressure at 20 °C:	175 hPa
Density at 20 °C:	0.89 g/cm³
Solubility in / Miscibility with water(20 °C):	Not miscible or difficult to mix.
Viscosity: Dynamic at 20 °C:	3500 mPas
Solvent content: Organic solvents: VOC% (EC)	56.3 % 56.30 %
Solids content: 9.2 Other information	43.7 % No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity
- · 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

i0 > 5000 mg/l i0 > 2000 mg/l one	• • •					
one						
i0 3300 mg/kg	(Rat)					
i0 5000 mg/kg	(Rabbit)					
0, 4h 20 mg/l (Ra	t)					
bis(dibutyldithiod	arbamate)					
i0 > 2000 mg/l	kg (Rat)					
	5000 mg/kg 50, 4h 20 mg/l (Ra bis(dibutyldithioc 0 > 2000 mg/l 10 > 2000 mg/l 10 > 2000 mg/l	0 5000 mg/kg (Rabbit) 0, 4h 20 mg/l (Rat) bis(dibutyldithiocarbamate) 0 0 > 2000 mg/kg (Rat) ot effect: 0	5000 mg/kg (Rabbit) i0, 4h 20 mg/l (Rat) bis(dibutyldithiocarbamate) i0 > 2000 mg/kg (Rat) int effect: n/irritation Irritant to skin and mucous membranes.	5000 mg/kg (Rabbit) i0, 4h 20 mg/l (Rat) bis(dibutyldithiocarbamate) i0 > 2000 mg/kg (Rat) int effect: n/irritation Irritant to skin and mucous membranes.	0 5000 mg/kg (Rabbit) 0, 4h 20 mg/l (Rat) bis(dibutyldithiocarbamate) 0 > 2000 mg/kg (Rat) ot effect: n/irritation Irritant to skin and mucous membranes.	5000 mg/kg (Rabbit) i0, 4h 20 mg/l (Rat) bis(dibutyldithiocarbamate) i0 > 2000 mg/kg (Rat) it effect: n/irritation Irritant to skin and mucous membranes.

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• Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

· 12 1 T	oxicity
	ic toxicity:
-	-7 cyclohexane
	48h 0.9 mg/l (Daphnia magna)
	72h 3.4 mg/l (Algae)
	96h 4.53 mg/l (Fathered minnow, Pimephales promelas)
	3 butanone
	48h > 5000 mg/l (Daphnia magna)
	96h > 2500 mg/l (Pimephales Promelas)
	ersistence and degradability. No further relevant information available. ioaccumulative potential. No further relevant information available.
	obility in soil No further relevant information available.
	kical effects:
Remar	k: Toxic for fish
Other	information:
Ecotox	icological data have not been determined specifically for this product. Information given is based on knowledge
	nponents and the ecotoxicology of similar products.
	onal ecological information:
	al notes:
	hazard class 2 (German Regulation) (Self-assessment): hazardous for water
	allow product to reach ground water, water course or sewage system.
	r to drinking water if even small quantities leak into the ground.
	pisonous for fish and plankton in water bodies.
	or aquatic organisms
	esults of PBT and vPvB assessment
	lot applicable. Not applicable.
	ther adverse effects No further relevant information available.

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

14.1 UN-Number ADR, IMDG, IATA	UN1133
14.2 UN proper shipping name	
ADR	1133 ADHESIVES, special provision 640H, ENVIRONMENTAL
	HAZARDOUS
IMDG	ADHESIVES (Naphtha (petroleum), hydrotreated ligl
	CYCLOHEXANE), MARINE POLLUTANT
ΙΑΤΑ	ADHESIVES

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14.3 Transport hazard class(es)	
ADR	
Class	3 (F1) Flammable liquids.
Label	3
IMDG	
Class	3 Flammable liquids.
Label	3
IATA	
3	
Class	3 Flammable liquids.
Label	3
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	Product contains environmentally hazardous substance
	cyclohexane, Naphtha (petroleum), hydrotreated light
Marine pollutant:	Yes
	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler):	33
EMS Number:	F-E, <u>S-D</u>
14.7 Transport in bulk according to Ann	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (ÉQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
Transport astarau	Maximum net quantity per outer packaging: 1000 ml
Transport category Tunnel restriction code	3 D/E
	<i></i>
Limited quantities (LQ)	5L Codo: E1
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 30 ml
Remarks:	The product is, based on the viscosity, classified in accordance v
	IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.
UN "Model Regulation":	UN1133, ADHESIVES, special provision 640

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SECTION 15: Regulatory information

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

· National regulations:

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

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.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

· Department issuing MSDS: Product Safety Department

· Contact: kam-manager: kam@hertalan.com

 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 Flam. Liq. 2: Flammable liquids, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 Asp. Tox. 1: Aspiration hazard, Hazard Category 1 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2 Sources Classification corresponds to the current lists of the EEC, is supplemented with data from publications and data from the company.

* Data compared to the previous version altered.