

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

- **1.1 Product identifier**
- **Trade name: FS14**
- **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

Eye Irrit. 2 H319 Causes serious eye 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



GHS09

- **Signal word** Danger
- **Hazard statements**
 H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
 P280 Wear protective gloves / eye protection.
 P210 Keep away from open flames. - No smoking.
 P262 Do not get in eyes, on skin, or on clothing.
 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.

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- **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: 141-78-6 EINECS: 205-500-4	ethyl acetate ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 110-82-7 EINECS: 203-806-2	cyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
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	2.5-10%
ELINCS: 484-050-2	Micronised Amide wax ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	< 2.5%
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.
- **After inhalation:**
If the casualty is not breathing: Perform mouth-to-mouth or mouth-to-nose resuscitation, notify emergency physician immediately
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **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:** Extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**
Water
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.

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Wear fully protective suit.

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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.
- **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.
Do not flush with water or aqueous cleansing agents
- **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** No special measures required.
- **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

- **Ingredients with limit values that require monitoring at the workplace:**

141-78-6 ethyl acetate

WEL	Short-term value: 400 ppm Long-term value: 200 ppm
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110-82-7 cyclohexane

WEL	Short-term value: 1050 mg/m ³ , 300 ppm Long-term value: 350 mg/m ³ , 100 ppm
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- **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.

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

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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 self-contained respiratory protective device.

Filter A2P3(EN141)

Not required.

· **Protection of hands:**

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 through 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)

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

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Pasty

Colour: Dark grey

· **Odour:** Characteristic

· **pH-value:** Not applicable.

· **Change in condition**

Boiling point/Boiling range: 77 °C

· **Flash point:** < -5 °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: 2.1 Vol %

Upper: 11.5 Vol %

· **Vapour pressure at 20 °C:** 97 hPa

· **Density at 20 °C:** 1.15 g/cm³

· **Solubility in / Miscibility with**

water(20 °C): Not miscible or difficult to mix.

· **Viscosity:**

Dynamic at 20 °C: 450000 mPas

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- | | |
|---|-----------|
| · Solvent content: | |
| Organic solvents: | 25.9 % |
| VOC (EG) | 298.2 g/l |
| · VOC% (EC) | 25.93 % |
| · Solids content: 76.0 % | |
| · 9.2 Other information 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**

- **LD/LC50 values relevant for classification:**

141-78-6 ethyl acetate

Oral	LD50	5620 mg/kg (Rabbit)
Inhalative	LC50, 4h	1600 mg/l (Rat)

110-82-7 cyclohexane

Oral	LD50	> 5000 mg/kg (Rat)
Dermal	LD50	> 2000 mg/kg (Rabbit)

136-23-2 zinc bis(dibutyldithiocarbamate)

Oral	LD50	> 2000 mg/kg (Rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

141-78-6 ethyl acetate

EC50, 24h	> 164 mg/l	(Daphnia magna)
LC50, 96h	> 230 mg/l	(Fish)

110-82-7 cyclohexane

EC50, 48h	0.9 mg/l	(Daphnia magna)
EC50, 72h	3.4 mg/l	(Algae)
LC50, 96h	4.53 mg/l	(Fatheted minnow, Pimephales promelas)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological 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.

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- **Additional ecological information:**
- **General notes:**
Generally not hazardous for water
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.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA | UN1133 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA | 1133 ADHESIVES, special provision 640H, ENVIRONMENTALLY HAZARDOUS
ADHESIVES (CYCLOHEXANE, Naphtha (petroleum), hydrotreated light), MARINE POLLUTANT
ADHESIVES |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR | <div style="display: flex; align-items: center; gap: 10px;">   </div> |
| <ul style="list-style-type: none"> · Class · Label | 3 (F1) Flammable liquids.
3 |
| <ul style="list-style-type: none"> · IMDG | <div style="display: flex; align-items: center; gap: 10px;">  </div> |
| <ul style="list-style-type: none"> · Class | 3 Flammable liquids. |
| <ul style="list-style-type: none"> · IATA | <div style="display: flex; align-items: center; gap: 10px;">  </div> |
| <ul style="list-style-type: none"> · Class · Label | 3 Flammable liquids.
3 |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR, IATA | III |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): | Yes
Symbol (fish and tree)
Symbol (fish and tree) |

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· 14.6 Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E
· IMDG	
· Remarks:	The product is, based on the viscosity, classified in accordance with IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.
· UN "Model Regulation":	UN1133, ADHESIVES, special provision 640H, ENVIRONMENTALLY HAZARDOUS, 3, III

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.

- **National regulations:**

Class	Share in %
NK	25-50

- **Waterhazard class:** Generally not 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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent

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*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 - Acute Hazard, 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.**

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