

SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

FIXUM METAL NON FERRO ALU KIT - Koker 310 ml

1.2. Relevant identified uses of the substance or mixture and uses advised against Universal sealant silicone-based, alcoxy curing.
Intended use.**1.3. Details of the supplier of the safety data sheet**Zinkunie BV
Van Salmstraat 46
5281 RS Boxtel
T 0411-688339 - F 0411-688343
info@zinkunie.nl - www.zinkunie.nl**RUBRIEK 2: Identificatie van de gevaren****2.1. Classification of the substance or mixture.**

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

2.2. Label elements.Hazard pictograms: –
Signal words: –
Hazard statements: –
Precautionary statements: –

Safety data sheet available on request. It Contains 3- (triethoxysilyl) propylamine. May cause allergic reactions.

2.3. Other hazards.

During curing releases ETHANOL (CAS 64-17-5) by hydrolysis.

SECTION 3. Composition/information on ingredients.**3.1. Substances.**

Information not relevant.

3.2. Mixtures.

Contains:

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
Distillates (petroleum), intermediate fraction hydrotreated			
CAS. 64742-46-7 EC. 265-148-2	13,5 - 15	Xn R65, Note N	Asp. Tox. 1 H304, Note N
INDEX. 649-221-00-X			
Reg. no. 01-2119552497-29			
3-aminopropyl (methyl) silsesquioxanes, ethoxy termination			
CAS. 128446-60-6	2,5 - 3	R10, Xi R36/38	Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC. -			
INDEX. -			

Morfolinometil-trietossisilano

CAS. 21743-27-1 EC. 480-370-1	1,5 - 2	R52/53	Aquatic Chronic 3 H412
INDEX. -			
Reg. no. 01-0000020083-82			
ETHANOL			
CAS. 64-17-5 EC. 200-578-6	1 - 1,5	F R11	Flam. Liq. 2 H225
INDEX. 603-002-00-5			

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.
 T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E),
 F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. **INGESTION:** Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

In case of fire possible formation of smoke and hazardous gases. Exposure to combustion products may cause a health hazard! dangerous products in case of fire: carbon oxides, silicon oxides, nitrogen oxides, hydrocarbons not completely burned, toxic and very toxic fumes.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Signal the area. Wear personal protection equipment (see. Section 8). Remove all persons without protective equipment. In the case of material is released indicate risk of slipping. Do not walk in the middle of the spilled material.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

Not to enter waters, drains or sewers and soil. Close the loss, if you can do it without risk. Contain contaminated water / extinguishing water. Deleting cotrassegnati containers according to the regulations in force. Inform the competent authorities in case of contamination of water, sewerage or underground.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges.

In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

The product can liberate ethanol. In enclosed spaces vapors can form mixtures with air, which in the presence of ignition sources causing explosion also inside containers, uncleaned.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Protect from moisture. Keep containers tightly closed and store in a cool, well-ventilated area.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

United Kingdom	EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).
Éire	Code of Practice Chemical Agent Regulations 2011.
OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
TLV-ACGIH	ACGIH 2012

ETHANOL

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m ³	ppm	mg/m ³	ppm
WEL	UK	1920	1000		
OEL	IRL				1000
TLV-ACGIH				1884	1000

Legend:

(C)= CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

HAND PROTECTION

Protective gloves made of butyl rubber (Material thickness:> 0.3 mm; Breakthrough time:> 480 min). Protective gloves nitrile rubber (Material thickness:>

0.2 mm; Breakthrough time: 30-60 min).The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter filter ABEK (certain gases and vapors inorganic and organic acids, ammonia / amines), in accordance with recognized standards such as EN 14387.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529. standards such as EN 14387.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	pasty
Colour	transparent
Odour	typical
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not applicable.
Initial boiling point.	Not applicable.
Boiling range.	Not available.
Flash point.	Not available.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower flammability limit.	Not available.
Upper flammability limit.	Not available.
Lower explosive limit.	Not applicable.
Upper explosive limit.	Not applicable.
Vapour pressure.	Not available.

Vapour density	Not available.
Relative density.	0,990 Kg/l
Solubility	immiscible with water
Partition coefficient: n-octanol/water	Not available. Auto-ignition temperature. > 400 °C.
Decomposition temperature.	Not available.
Viscosity	alta
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

VOC (Directive 1999/13/EC):	1,00 % - 9,90 g/litre.
VOC (volatile carbon):	0
Can pressure:	N.A.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.
Reacts with: water, bases and acids.
The reaction occurs with formation of ethanol.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

ETHANOL: risk of explosion on contact with: alkaline metals, alkaline oxides, calcium hypochlorite, sulphur monofluoride, acetic anhydride (with acids), concentrated hydrogen peroxide, perchlorates, perchloric acid, perchloronitrile, mercury nitrate, nitric acid, silver and nitric acid, silver nitrate, silver nitrate and ammonia, silver oxide and ammonia, strong oxidising agents, nitrogen dioxide. Can react dangerously with: bromoacetylene, chlorine acetylene, bromine trifluoride, chromium trioxide, chromyl chloride, oxiranes, fluorine, potassium tert-butoxide, lithium hydride, phosphorus trioxide, black platinum, zirconium (IV) chloride, zirconium (IV) iodide. Forms an explosive mixture with the air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition. ETHANOL: avoid exposure to sources of heat and naked flames.
Avoid moisture.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.
Ethanol - The checks show that at temperatures above 150 °C, for oxidative decomposition, is released a small amount of formaldehyde.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

Distillates (petroleum), intermediate "hydrotreating" - According to literature the aliphatic and naphthenic hydrocarbons have a slightly irritating effect on the epidermis and mucous membranes. Degrease the skin. Narcotic. In the case of direct action on lung tissues (eg. By aspiration) can cause pneumonia.

ETHANOL

LD50 (Oral). > 5000 mg/kg Rat

LC50 (Inhalation). 120 mg/l/4h Pimephales promelas

With regard to the mixture:

LD50(ORAL) > 2000 mg/kg Rat - Conclusion by analogy.

SECTION 12. Ecological information.

12.1. Toxicity.

ETHANOL

LC50 - for Fish.

15300 mg/l/96h Pesce - Pimephales promelas

Rating based on ecotoxicological studies with similar products in view of the physico-chemical properties: for this product are not expected effects relevant for classification on aquatic organisms. At present the experiences are not to be expected adverse effects on water purification plants.

ErC50 (growth rate / 72h) > 100 mg / l (Pseudokirchneriella subcapitata - Conclusion by analogy).

12.2. Persistence and degradability.

The paraffinic hydrocarbons fraction may be considered biodegradable in water and in air. They distribute mostly in the air. The small non biodegradable amount which spreads into water tends to accumulate in fish.

Silicone: not biodegradable. Separation by sedimentation The hydrolysis product (Ethanol) is readily biodegradable.

12.3. Bioaccumulative potential.
Unlikely bioaccumulation.

12.4. Mobility in soil.
Insoluble in water. Good separation from water by filtration in the cured state.

12.5. Results of PBT and vPvB assessment.
On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.
Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.
Reuse, when possible. Neat product residues should be considered special non-hazardous waste.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Avoid littering.
Do not contaminate soil, sewers and waterways.

CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

The valid EEC waste code are largely source-related; the manufacturer is, therefore, unable to specify waste codes for products used in various sectors. Small quantities of cured product can be treated as industrial waste similar to MSW.
CER-code (suggested): 08 04 10.

SECTION 14. Transport information.

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code - It is not meant for carriage in bulk in tankers.

SECTION 15. Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.
Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Contained substance.
Point. 28 Distillates (petroleum), intermediate fraction hydrotreated
Reg. no.: 01-2119552497-
29

Substances in Candidate List (Art. 59 REACH).
None.

Substances subject to authorisation (Annex XIV REACH).
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None.

Substances subject to the Rotterdam Convention:
None.

Substances subject to the Stockholm Convention:
None.

Healthcare controls.
Information not available.

Inventory Status - On or in compliance with the following inventories:
REACH (Reg. CE 1907/2006) - Europe
ECL -
Korea
ENCS - Japan AICS - Australia PICCS - Philippines TSCA - USA.

15.2. Chemical safety assessment.
No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

H304	May be fatal if swallowed and enters airways.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10	FLAMMABLE.
R11	HIGHLY FLAMMABLE.
R36/38	IRRITATING TO EYES AND SKIN.
R65	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version.

Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 06 / 09 / 11 / 15 / 16.