



Kinetics Controls & Innovation Ltd

SAFETY DATA SHEET

Mac-Pac Compound

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

1.1. Product identifier

Product name Mac-Pac Compound

Synonyms; trade names Mac-Pac

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

Identified uses Sealant.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier KCI Ltd (Kinetics Control and Innovation Limited)
Unit 4 & 6-7
1 Kirkhill Place
Dyce
Aberdeen
AB21 0GU
UK
+44 (0)1224 255480
www.kciltld.co.uk
info@kciltld.co.uk

Contact person Roy MacKenzie

1.4. Emergency telephone number

Emergency telephone +44 (0) 1224 255480 (office hours only)

National emergency telephone NHS: 111 (Members of the public)

number UK National Poisons Information Service: 0844 892 0111 (Health Professionals Only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Mac-Pac Compound

| | |
|-----------------------|-----------------------------|
| Health hazards | Eye Irrit. 2 - H319 |
| Environmental hazards | Aquatic Chronic 3 - H412 |

2.2. Label elements



Pictogram

| | |
|--------------------------|--|
| Signal word | Warning |
| Hazard statements | H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects. |
| Precautionary statements | P264 Wash contaminated skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations. |

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | |
|------------------------------|----------------------|
| Zircon | 30- 60% |
| CAS number: 14940-68-2 | EC number: 239-019-6 |
| Classification | |
| Not Classified | |
| octamethylcyclotetrasiloxane | 1- 5% |
| CAS number: 556-67-2 | EC number: 209-136-7 |
| Classification | |
| Flam. Liq. 3 - H226 | |
| Repr. 2 - H361f | |
| Aquatic Chronic 4 - H413 | |
| 2-(2-butoxyethoxy)ethanol | 1- 5% |
| CAS number: 112-34-5 | EC number: 203-961-6 |

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| | |
|--|------------------------|
| Classification Eye Irrit. 2 - H319 | |
| Alcohols, C9-11 ethoxylated, < 2.5 EO | 1-5% |
| CAS number: 68439-46-3 | EC number: 614-482-0 |
| Classification Eye Dam. 1 - H318 | |
| zinc oxide | <1% |
| CAS number: 1314-13-2 | EC number: 215-222-5 |
| M factor (Acute) = 1 | M factor (Chronic) = 1 |
| Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|----------------------------|---|
| General information | Treat symptomatically. Get medical attention. |
| Inhalation | Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist. |
| Ingestion | Rinse mouth thoroughly with water. Get medical attention if symptoms are severe or persist. |
| Skin contact | IF ON SKIN (or hair): Rinse immediately with plenty of water. |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms are severe or persist after washing. |
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. |

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

| | |
|---------------------|--|
| General information | The product is considered to be a low hazard under normal conditions of use. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. |
| Skin contact | No specific symptoms known. |
| Eye contact | Irritating to eyes. |

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam. Carbon dioxide (CO₂). Dry chemicals. Powder. Water spray, fog or mist. Inert gas.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards Not known.

Hazardous combustion products Oxides of carbon. Formaldehyde. Metal products. Quartz. Silica.

5.3. Advice for firefighters

Protective actions during firefighting In case of fire: Evacuate area. Fight fire with normal precautions from a reasonable distance. Control run-off water by containing and keeping it out of sewers and watercourses. Contain and collect extinguishing water. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment materials. for firefighters Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Take care as floors and other surfaces may become slippery.

6.2. Environmental precautions

Environmental precautions The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. If leakage cannot be stopped, evacuate area. Small Spillages: Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Large Spillages: Should be contained by bunding or dyking and prevent from reaching drains, ditches, or rivers. All Spillages: Collect and place in suitable waste disposal containers and seal securely. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

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Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Mechanical ventilation or local exhaust ventilation may be required.

Advice on general hygiene Provide eyewash station. Wash hands thoroughly after handling. Good personal hygiene occupational hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters Occupational exposure limits

Zircon

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

Short-term exposure limit (15-minute): WEL 10 mg/m³

2-(2-butoxyethoxy)ethanol

Long-term exposure limit (8-hour TWA): WEL 67.5 mg/m³ 10 ppm

Short-term exposure limit (15-minute): WEL 101.2 mg/m³ 15 ppm

zinc oxide

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume and respirable dust

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume and respirable dust

WEL = Workplace Exposure Limit

DNEL

Alcohols, C9-11 ethoxylated, < 2.5 EO (EC 614-482-0, CAS 68439-46-3):

Workers - Inhalation; Long term systemic effects: 294 mg/m³

Workers - Dermal; Long term systemic effects: 2080 mg/kg bw/day

General population - Inhalation; Long term systemic effects: 87 mg/m³

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General population - Dermal; Long term systemic effects: 1250 mg/kg bw/day
 General population - Oral; Long term systemic effects: 25 mg/kg bw/day
 Zinc oxide (EC 215-222-5, CAS 1314-13-2):
 Workers - Inhalation; Long term systemic effects: 5 mg/m³
 Workers - Dermal; Long term systemic effects: 83 mg/kg bw/day
 General population - Inhalation; Long term systemic effects: 2.5 mg/m³
 General population - Dermal; Long term systemic effects: 83 mg/kg bw/day
 General population - Oral; Long term systemic effects: 0.83 mg/kg bw/day

PNEC

Alcohols, C9-11 ethoxylated, < 2.5 EO (EC 614-482-0, CAS 68439-46-3):
 PNEC - Fresh water; Long term 0.10379 mg/l
 PNEC - Marine water; Long term 0.10379 mg/l
 PNEC - Intermittent release; Long term 0.014 mg/l
 PNEC - STP; Long term
 PNEC - Sediment (Freshwater); Long term 13.7 mg/kg sediment dw
 PNEC - Sediment (Marinewater); Long term 13.7 mg/kg sediment dw
 PNEC - Soil; Long term 1 mg/kg soil dw
 Zinc oxide (EC 215-222-5, CAS 1314-13-2):
 PNEC - Fresh water; Long term 0.0206 mg/l
 PNEC - Marine water; Long term 0.0061 mg/l
 PNEC - STP; Long term 0.1000 mg/l
 PNEC - Sediment (Freshwater); Long term 117.8 mg/kg sediment dw
 PNEC - Sediment (Marinewater); Long term 0.0565 mg/kg sediment dw
 PNEC - Soil; Long term 35.6 mg/kg soil dw

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Chemical splash goggles or face shield.

Hand protection

Wear protective gloves.

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Good personal hygiene procedures should be implemented.

Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Mac-Pac Compound

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|----------------------|--|
| Appearance | Paste. |
| Colour | Off-white. |
| Odour | No characteristic odour. |
| Flash point | > 100°C CC (Closed cup). |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |
| Comments | This information is not intended for use in preparing product specification. |

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid None known.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Heating may generate the following products: Formaldehyde vapour. Quartz. Fibrogenic dust.

SECTION 11: Toxicological information

11.1. Information on toxicological effects Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes.

SECTION 12: Ecological Information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

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|--|---|
| Acute toxicity - fish | Zinc oxide (EC 215-222-5, CAS 1314-13-2): LC ₅₀ , 96 hour: 1.1 mg/l, (Data Source: GESTIS Substance Database) |
| Acute toxicity - aquatic invertebrates | Zinc oxide (EC 215-222-5, CAS 1314-13-2): LC ₅₀ , 48 hour: 0.098 mg/l, (Data source: GESTIS Substance Database) |
| 12.2. Persistence and degradability | |
| Persistence and degradability | The product contains inorganic substances which are not biodegradable. The product contains persistent (not readily degradable) substances. The other substances in the product are expected to be readily biodegradable. |
| Stability (hydrolysis) | Not known. |
| 12.3. Bioaccumulative potential | |
| Bioaccumulative potential | The product does not contain any substances expected to be bioaccumulating. |
| 12.4. Mobility in soil | |
| Mobility | No information available. |
| 12.5. Results of PBT and vPvB assessment | |
| Results of PBT and vPvB assessment | This product does not contain any substances classified as PBT or vPvB. |
| 12.6. Other adverse effects | |
| Other adverse effects | None known. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|---------------------|---|
| General information | Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. |
| Disposal methods | External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations. |

SECTION 14: Transport information

| | |
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| General | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). |
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14.1. UN number

Mac-Pac Compound

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not
applicable. Annex II of MARPOL 73/78 and
the IBC Code

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

General information

The data contained herein does not constitute the user's own assessment or workplace risk as required by other health and safety legislation (e.g. COSHH 1988). The data does not signify any warranty with regard to the product's properties.

Mac-Pac Compound

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|---------------------------|--|
| Revision comments | <p>This revision to the SDS removed classification information according to Directive 67/548/EEC (Dangerous Substances Directive) and Directive 1999/45/EC (Dangerous Preparations Directive). Removal of this information is a requirement of Regulation (EC) No 1272/2008 (Classification Labelling and Packaging Regulation).</p> |
| Revision date | 03/07/2015 |
| Supersedes date | 02/03/2015 |
| SDS number | 4545 |
| Hazard statements in full | <p>H226 Flammable liquid and vapour. H318 Causes serious eye damage. H319 Causes serious eye irritation. H361f Suspected of damaging fertility. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life.</p> |