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

1.1. Product identifier

Product name: INSULGEL 70CC FRNS PT B
Product number: IE403H

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

Identified uses: Casting compound

1.3. Details of the supplier of the safety data sheet

Supplier: ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwpp.com

1.4. Emergency telephone number

Emergency telephone: +44(0)1235 239 670 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards: Not Classified

Health hazards: Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Elicitation - EUH208 Skin Sens. 1 - H317 Repr. 2 - H361fd

Environmental hazards: Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram

Signal word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H302+H312 Harmful if swallowed or in contact with skin.
H410 Very toxic to aquatic life with long lasting effects.
INSULGEL 70CC FRNS PT B

Precautionary statements
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapour/spray.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains
4-NONYLPHENOL, Branched, POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, N-(2-Aminoethyl)piperazine, 3,6,9-TRIAZUNDECAMETHYLENEDIAMINE, PIPERAZINE

Supplementary precautionary statements
P201 Obtain special instructions before use.
P261 Avoid breathing vapour/spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>3,6,9-TRIAZUNDECAMETHYLENEDIAMINE</th>
<th>10-30%</th>
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<tr>
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<tr>
<td>EC number: 203-986-2</td>
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</tbody>
</table>

Classification
Acute Tox. 4 - H312
Skin Corr. 1B - H314
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411
INSULGEL 70CC FRNS PT B

N-(2-Aminoethyl)piperazine 10-30%
CAS number: 140-31-8

Classification
Acute Tox. 4 - H302
Acute Tox. 3 - H311
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY) 10-30%
CAS number: 9046-10-0

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Aquatic Chronic 3 - H412

4-NONYLPHENOL, Branched 10-30%
CAS number: 84852-15-3
EC number: 284-325-5
M factor (Acute) = 1
M factor (Chronic) = 1

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Repr. 2 - H361fd
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

PIPERAZINE <1%
CAS number: 110-85-0
EC number: 203-808-3

Classification
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Resp. Sens. 1 - H334
Skin Sens. 1 - H317
Repr. 2 - H361fd

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.
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Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician for specific advice.

Skin contact

Remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Ingestion

This product is corrosive. Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach. May cause severe internal injury.

Skin contact

This product is corrosive. May cause serious chemical burns to the skin.

Eye contact

Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

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

Notes for the doctor

No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with carbon dioxide or dry powder. Water spray, fog or mist.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during firefighting

Use water to keep fire exposed containers cool and disperse vapours.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Keep unnecessary and unprotected personnel away from the spillage. Avoid inhalation of vapours and contact with skin and eyes. Avoid contact with skin and eyes. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions

Avoid release to the environment. To prevent release, place container with damaged side up. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge into drains or watercourses or onto the ground. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).
6.3. Methods and material for containment and cleaning up

Methods for cleaning up
Stop leak if safe to do so. Move containers from spillage area. Provide adequate ventilation. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Absorb spillage with non-combustible, absorbent material. Contain spillage with sand, earth or other suitable non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections
For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions
Restricted to professional users. Do not handle until all safety precautions have been read and understood. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not breathe vapour/spray. Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Eye wash facilities and emergency shower must be available when handling this product.

Advice on general occupational hygiene
Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse. Wash after use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store locked up. Store away from incompatible materials (see Section 10).

Storage class
Toxic storage. Corrosive storage.

7.3. Specific end use(s)

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

Usage description
Provide adequate ventilation.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. Provide adequate general and local exhaust ventilation. Mechanical ventilation or local exhaust ventilation may be required. Avoid inhalation of vapours.

Personal protection
Do not breathe vapour/spray.

Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.
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Hand protection
The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Other skin and body protection
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures
Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection
Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

SECTION 9: Physical and Chemical Properties
9.1. Information on basic physical and chemical properties

Appearance
Liquid.

Colour
Colourless to pale yellow.

pH
pH (concentrated solution): Not Determined

Melting point
Not Determined°C

Initial boiling point and range
Not Determined°C @

Flash point
>93.9°C

Evaporation rate
Not Determined

Vapour density
Not Determined

Relative density
0.98

9.2. Other information

Other information
Not available.

Volatile organic compound
This product contains a maximum VOC content of 0.

SECTION 10: Stability and reactivity
10.1. Reactivity
Reactivity
Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability
Stability
Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Will not polymerise.

10.4. Conditions to avoid
Conditions to avoid
Avoid heat.

10.5. Incompatible materials
Materials to avoid
Phenols, cresols. Peroxides.
INSULGEL 70CC FRNS PT B

10.6. Hazardous decomposition products

Hazardous decomposition products Not known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg) 61,688.0

Acute toxicity - dermal
ATE dermal (mg/kg) 117,857.0

Inhalation
Prolonged inhalation of high concentrations may damage respiratory system. May be harmful if inhaled.

Ingestion
Nonylphenol - Oral Rat LD50 1300 mg/kg (Liver - other changes blood - hemorrhage nutritional and gross metaboliv- weight loss or decreased weight gain). N-aminoethylpiperazine - Rat LD50 2140 uL/KG. Tetraethylenepentamine Rat LD50 3990 mg/kg This product is corrosive. May cause chemical burns in mouth, oesophagus and stomach.

Skin contact
N-amino: Rabbit open irritation test 100ug/24H. Tetra: Rabbit open irritation test 495 ug (severe) May cause serious chemical burns to the skin. May cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact
Nonyl: Rabbit standard draize test 100 mg, N-amino: Rabbit standard draize test 20 mg/24H (moderate), Tetra: Rabbit standard draize test 5 mg (moderate) Causes serious eye damage.

SECTION 12: Ecological Information

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

12.1. Toxicity
Toxicity
Very toxic to aquatic organisms.

12.2. Persistence and degradability

Persistence and degradability
There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential
No data available on bioaccumulation.

12.4. Mobility in soil
Mobility
Not considered mobile.

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
Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
INSULGEL 70CC FRNS PT B

**General information**
Dispose of waste via a licensed waste disposal contractor. Dispose of waste product or used containers in accordance with local regulations. This material and its container must be disposed of as hazardous waste.

**Disposal methods**
Dispose of this material and its container to hazardous or special waste collection point. Dispose of waste via a licensed waste disposal contractor. Dispose of waste product or used containers in accordance with local regulations.

**Waste class**
08 04 99

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<th>SECTION 14: Transport information</th>
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<tr>
<td>14.1. UN number</td>
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<td>UN No. (IMDG)</td>
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<td>ICAO packing group</td>
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<tr>
<td>14.5. Environmental hazards</td>
</tr>
</tbody>
</table>

INSULGEL 70CC FRNS PT B

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS F-A, S-B

ADR transport category 3

Emergency Action Code 2X

Hazard Identification Number 80

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL 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.

SECTION 16: Other information

Revision date 04/04/2018

Revision 6

Supersedes date 29/04/2016

Hazard statements in full EUH208 Contains PIPERAZINE. May produce an allergic reaction.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
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.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.