1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY.

1.1 Substance Identifiers.

<table>
<thead>
<tr>
<th>Substance Name:</th>
<th>Modified polycarboxylate ether.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Name:</td>
<td>DeCal 2095</td>
</tr>
<tr>
<td>CAS Number:</td>
<td></td>
</tr>
<tr>
<td>EINECS Number:</td>
<td>None</td>
</tr>
<tr>
<td>Index Number:</td>
<td>None</td>
</tr>
<tr>
<td>REACH Number:</td>
<td>As a functionalised polymer this substance is exempt from registration in accordance with Article 5 of the REACH regulation.</td>
</tr>
</tbody>
</table>

1.2 Identified uses and uses advised against.

1.2.1 Identified Uses: As a dispersing agent and superplasticizer in powdered adhesives, plasters, mortars, self-levelling screeds and similar compositions.

1.2.2 Uses advised against: This substance is not subject to authorisation or restriction according to any known legislation. The supplier does however advise against uses other than those identified above.

1.3 Details of supplier.

<table>
<thead>
<tr>
<th>Supplier:</th>
<th>Devine Chemicals Ltd., Prospect Business Park, Leadgate, Consett, Co. Durham, DH8 7PW.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone:</td>
<td>01207-580101</td>
</tr>
<tr>
<td>Fax:</td>
<td>01207-580096</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:jim@devinechemicals.co.uk">jim@devinechemicals.co.uk</a></td>
</tr>
</tbody>
</table>

1.4 Emergency telephone number: 07810-810608 from 0800 to 2000 hours every day.

SECTION 2 HAZARDS IDENTIFICATION.

2.1 Classification.

This substance does not meet the criteria for classification as hazardous laid down in Regulation (EC) 1272/2008 (CLP).

However, as is the case with all chemical compositions, certain precautionary measures aimed at ensuring the well-being of those who will use this substance and at protecting the natural environment against unnecessary pollution must be applied. Precautionary measures appropriate to this substance are detailed in the following pages.
SECTION 2 HAZARDS IDENTIFICATION (continued)
Prolonged or repeated contact with the skin may cause slight irritation and may aggravate any pre-existing condition. Inhalation of dust may cause irritation of the respiratory tract and lungs and may aggravate any pre-existing condition. Exposure of the eyes to dust from this substance may cause a burning sensation followed by itching and redness.

Discharge of this substance to watercourses or drainage systems may be harmful to the environment. Areas covered by spilled substance will be slippery when wet.

2.2 Label Elements
This substance is not subject to statutory labelling requirements.

3. COMPOSITION/INFORMATION ON INGREDIENTS.
This substance does not meet the criteria for disclosure in this section nor is it required to be registered in accordance with Article 5 of the REACH regulation.

SECTION 4 FIRST AID MEASURES.
4.1 Description of first aid measures.
General Information: In all cases of doubt or where symptoms persist seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation: Inhalation of dust from this substance may cause irritation of the respiratory tract and lungs and may aggravate any pre-existing condition. In the event of exposure remove the affected person to fresh air. Clear any blocked airways. Keep warm and allow to rest. If recovery is delayed seek medical attention.
Ingestion: This substance does not present any acute toxicity. DO NOT INDUCE VOMITING. Obtain medical attention immediately. If unconscious check for breathing and pulse and place in the recovery position. If conscious rinse out the mouth with water and immediately give 1 pint of water to drink. Give a further one third of a pint of water to drink every 10 minutes until medical assistance arrives.
Skin Contact: Prolonged or repeated contact may cause slight irritation and may aggravate any pre-existing condition. Immediately flush the affected area with water. Wash with soap and water. DO NOT WASH WITH SOLVENTS OR THINNERS. Remove grossly contaminated clothing, including footwear, and launder/clean thoroughly before re-use.
Eye Contact: Exposure of the eyes to dust from this substance may cause irritation. Quickly but gently wipe chemical from the face. Check for and remove any contact lenses. Immediately flush eye(s) with lukewarm gently flowing water for 5 minutes while holding the eyelid(s) open. If feeling of irritation persists obtain medical advice.

4.2 Most important symptoms and effects, both acute and delayed.
Acute: Contact with eyes and related tissue may cause irritation. Prolonged or repeated contact with skin may cause mild irritation. Not expected to cause significant immediate hazard if spilled.
Delayed effects: None known.

4.3 Indication of any immediate attention ands special treatment needed.
Note to physician: Treat symptomatically.
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SECTION 5 FIRE FIGHTING MEASURES.

Extinguishing media: This substance does not burn or support combustion. Use extinguishing media appropriate to nature of materials involved in any nearby fire and the prevailing circumstances.

Special exposure hazards: Exposure to fire or very high temperatures may result in the evolution of oxides of carbon which represent a health and suffocation hazard.

Special protective equipment for fire-fighters: Wear a self-contained breathing apparatus. Full protective clothing.

SECTION 6 ACCIDENTAL RELEASE/SPILLAGE MEASURES.

6.1 Personal Precautions Following Spill.
6.1.1 Non-emergency personnel: Wear recommended personal protective equipment and avoid all forms of contact.

6.1.2 Emergency responders: Evacuate all non-essential personnel from the vicinity of the spill. If indoors, ventilate the affected area. Mark out the affected area with signs and prevent unauthorised personnel from approaching the scene. If safe to do so turn leaking packages leak-side up in order to minimise leakage. Do not touch the spilled material.

6.2 Precautions to Protect Environment: Prevent spilled material entering drains. If spilled material enters drains or watercourses inform the emergency services and the local water authority.

6.3 Spill Clean-up Methods.
6.3.1 Containment: If spilled material cannot be immediately removed cover the spillage with an impermeable membrane and take steps to ensure that the membrane remains in place until the spilled material can be removed.

6.3.2 Clean up: As soon as possible collect the spilled material by vacuuming or by sweeping in a manner which avoids the formation of dust and transfer to clearly marked, sealed containers. Retain for disposal as recommended in Section 13. Scrub the affected area with detergent and water. If possible, collect wash water for disposal as recommended in Section 13. If not possible to collect wash water, flush washings to drain with copious amounts of water.

6.3.3 Any other information: None

6.4 Reference to other sections: See Section 8 for information on selecting personal protective equipment and Section 13 for details of recommended disposal methods.

SECTION 7 HANDLING AND STORAGE.

7.1 Precautions for safe handling.
7.1.1 Safe handling techniques: DO NOT EAT, DRINK OR SMOKE while using this substance. Handle only in a manner that minimises the risk of damage to packages, of spillage and the formation of dust. Use with adequate ventilation. Avoid contact with eyes, skin and clothing.

7.1.2 Occupational Hygiene: Wash hands thoroughly after working with this substance. Contaminated clothing, including footwear, must be thoroughly laundered/cleaned before re-use.

7.2 Safe Storage: Store away from strong oxidising agents, in sealed, clearly marked containers in an area which is dry and well ventilated.

7.3 Specific end-uses: None requiring special note.
SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION.

8.1 Control parameters.
8.1.1 Exposure limit values according to HSE publication EH40.
This substance has not, as such, been assigned a WEL but, taking due account of Note 44 shown in EH40, which is reproduced at point 8 in Section 16, the values shown here are considered to apply.

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>8 Hour TWA</th>
<th>15 min STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalable dust</td>
<td>N/A</td>
<td>N/A</td>
<td>10mg/m³</td>
<td>Not assigned</td>
</tr>
<tr>
<td>Respirable dust</td>
<td></td>
<td></td>
<td>4mg/m³</td>
<td>Not assigned</td>
</tr>
</tbody>
</table>

For details of a means of measuring airborne dust levels go to www.parrett.uk.com

8.2 Exposure controls.

8.2.1 Appropriate engineering controls: Good general ventilation ought to be adequate but may need to be supplemented by local exhaust ventilation if use within a confined space is necessary.

8.2.2 Personal protection.
8.2.2.1 Eye/face protection: Suitable chemical-resistant safety goggles should be worn. Consult a supplier of such equipment to identify the most appropriate type. Ensure that an eye-bath is available at the points of use.

8.2.2.2 Hand protection: Chemical resistant gloves of type EN 374 should be worn. Always abide by the instructions and information provided by the glove supplier on use, storage, maintenance and replacement.

Body protection: Use impervious overalls and boots. Consult a supplier of such equipment to identify most appropriate type. Always abide by the instructions and information provided by the supplier on use, storage, maintenance and replacement.

8.2.2.3 Respiratory protection: If dust is created a disposable dust mask which complies with EN149 FFP2S or a half or full face mask with a particle filter type P2 should be used.

8.2.3 Environmental exposure controls: Store only in sealed packages and take all steps necessary to minimise the risk of this substance entering drains or other water courses.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES.

<table>
<thead>
<tr>
<th>Property</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>White granular solid.</td>
</tr>
<tr>
<td>Odour:</td>
<td>None discernible.</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not relevant. Substance has no discernible odour.</td>
</tr>
<tr>
<td>pH: 1% solution:</td>
<td>Approx. 6.0 at 20°C.</td>
</tr>
<tr>
<td>Melting point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Initial Boiling point:</td>
<td>Not applicable. This substance is a solid.</td>
</tr>
<tr>
<td>Flash point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not applicable. This substance is a solid.</td>
</tr>
<tr>
<td>Flammability:</td>
<td>The substance does not burn or support combustion.</td>
</tr>
<tr>
<td>Upper/Lower flammability limits:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Bulk density:</td>
<td>0.75 gm/cc at 20°C</td>
</tr>
<tr>
<td>Solubilities:</td>
<td>Readily soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Auto ignition temperature:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not applicable. This substance is a solid.</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td>This substance does not have explosive properties.</td>
</tr>
<tr>
<td>Oxidising properties:</td>
<td>This substance does not have oxidising properties.</td>
</tr>
</tbody>
</table>
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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity  
This substance does not react easily with other chemicals and is not expected to do so in anticipated conditions of storage and use. It will however react with strong oxidising agents.

10.2 Chemical Stability:  
This substance is stable under intended conditions of storage and use.

10.3 Possibility of Hazardous Reactions:  
The possibility of hazardous reactions is extremely low.

10.4 Conditions to avoid:  
Areas of high humidity.

10.5 Incompatible Materials:  
Strong oxidising agents.

10.6 Hazardous decomposition substances:  
Exposure to fire or very high temperatures may result in the evolution of oxides of carbon which represent a health and suffocation hazard.

SECTION 11 TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

a) Acute Toxicity Data:  
By analogy to similar products the acute LD$_{50}$ (Oral Rat) is expected to be >2000mg/kg.

b) Skin corrosion/irritation:  
In-use experience has shown that prolonged or repeated exposure of skin tissue to this substance may cause slight irritation and may aggravate any pre-existing condition.

c) Serious eye damage/irritation:  
In-use experience has shown that exposure of the eyes to dust from this substance may cause irritation.

d) Respiratory or skin sensitisation:  
In use experience has shown that inhalation of dust may cause irritation of the respiratory tract and lungs and may aggravate any pre-existing condition but is not known to cause respiratory or skin sensitisation.

e) Germ cell mutagenicity:  
This substance does not meet the criteria laid down in EU legislation for classification as mutagenic.

f) Carcinogenicity:  
This substance does not meet the criteria laid down in EU legislation for classification as carcinogenic.

g) Reproductive toxicity:  
This substance does not meet the criteria laid down in EU legislation for classification as toxic to reproduction.

h) STOT single exposure:  
This substance is not known to target any specific organ on single exposure.

i) STOT repeated exposure:  
This substance is not known to target any specific organ on repeated exposure.

j) Aspiration hazard:  
This substance does not meet the criteria laid down in EU legislation for classification as an aspiration hazard.

SECTION 12 ECOLOGICAL INFORMATION.

12.1 Toxicity  
The following data is considered to apply by analogy to similar substance  
LC$_{50}$ (96hr) Freshwater Fish (Brachydanio Rerio) 4220 mg/litre (OECD 203/EEC Directive 92/69, Method C1)  
EC$_{50}$ (72hr) Freshwater unicellular algae (Chlorella Vulgaris) 5135 mg/litre (OECD 201 EEC Directive 92/69 Method C3)  
EC$_{50}$ (24hr) Bacteria (Pseudomonas Putida) 5914 mh/litre (OECD 301F/EEC Directive 92/69 Method C4.D)

12.2 Persistence and degradability  
This substance is only poorly biodegradable and will therefore persist for some time in the natural environment.

12.3 Bioaccumulative potential  
This substance is not expected to bio-accumulate.

12.4 Mobility in soil  
The ready solubility of this substance in water suggests a high degree of mobility in soil.

12.5 Results of PBT assessment  
Assessment not carried out but this substance is believed not to be a PBT nor a vPvB.

12.6 Other adverse effects  
None known.
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SECTION 13 DISPOSAL CONSIDERATIONS.

Waste Disposal Method: Empty packages and waste from this substance are subject to disposal in accordance with The Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894) or other national equivalent.

SECTION 14 TRANSPORT INFORMATION.

This substance does not meet the criteria for classification as dangerous for transport by road (ADR), rail (RID), inland waterway (ADN), sea (IMDG) or air (ICAO/IATA).

However as with all chemical-based substances it must, when being transported, be handled in a manner that minimises the risk of damage to and leakage from the packages.

SECTION 15 REGULATORY INFORMATION.

15.1 Safety, health and environmental legislation specific for this substance.

This substance is not subject to the provisions of:


nor of individual Member State national legislation which invoke any or all of the following:


g) The current edition of the IATA Dangerous Goods Regulations.

15.2 Chemical safety assessment.
No chemical safety assessment has been carried out.

SECTION 16. OTHER INFORMATION

1. Additions and amendments to this SDS.
Despite the fact that this substance does not meet the criteria for classification as hazardous laid down in Regulation (EC) 1272/2008 (CLP) and is therefore not subject to the labelling provisions specified therein this SDS has been re-written to reflect the phasing out on 31st May 2015 of Directive 1999/45/EC (CHIP) and its replacement by the CLP regulation. The safety data contained in this version is essentially the same as that contained in the previous version.

2. Evaluation Method of Information Used in Classification.
Data provided by the manufacturer and literature searches.
SECTION 16. OTHER INFORMATION (continued)

3. Text of hazard statements referred to, but not shown, elsewhere in this SDS. Not applicable.

4. Sources of key data.
   The Hazardous Waste (England and Wales) Regulations.
   HSE Guidance Note EH40.
   The European Agreement Concerning the Carriage of Dangerous Goods by Road (ADR).
   The International Maritime Dangerous Goods Code.
   The International Air Transport Association Dangerous Goods Regulations.

5. Abbreviations and acronyms.
   ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
   ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterway
   CAS: Chemical Abstracts Service (of the American Chemical Society)
   EINECS: European Index of Existing Chemical Substances
   EC50: The half maximal effective concentration.
   ICAO/IATA: Regulations Concerning the Transport of Dangerous Goods by Air.
   IC50: The half maximal inhibitory concentration.
   IMDG: Regulations Concerning the Transport of Dangerous Goods by Sea.
   LD50: Lethal dose for 50% of test species.
   PBT: Persistent, bioaccumulative, ecotoxic.
   RID: European Agreement Concerning the International Carriage of Dangerous Goods by Rail.
   STOT: Specific target organ toxicity.
   vPvB: Very persistent and very bioaccumulative.
   WEL: Workplace Exposure Limit.

6. Training advice.
   All personnel who are required to work with this substance must receive training covering the appropriate use and handling techniques and the use of the recommended personal protective equipment.

7. Further information.
   7.1. Recommended restrictions on use (i.e. non-statutory recommendations by supplier).
   This substance should not be used for any purpose other than those mentioned in Section 1.2. As specific conditions of use of this substance are beyond the control of the supplier, the user is responsible for adapting the information contained in this SDS to local regulations and circumstances.

7.2 This substance:
   is not a persistent organic pollutant, as defined in EC regulation No. 850/2004,
   is not an ozone depleter, as defined in EC regulation No. 2037/2000,
   is not subject to the provisions of Regulation (EC) No. 689/2008 concerning the import and export of dangerous chemicals,
   nor is a named Seveso substance or in a Seveso category.

   The COSHH definition of substances hazardous to health includes dust of any kind present at a concentration in air equal to or greater than 10mg/m³, 8 hour TWA of inhalable dust or 4 mg/m³, 8 hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.

DISCLAIMER
The information contained in this SDS relates only to the material specified 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 of issue. However, no warranty, guarantee or representation is made as to its accuracy, reliability or completeness. It is the responsibility of the user to satisfy himself as to the
suitability of such information for his own particular use.