SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: PICS De-Icer

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

- Identified uses: Ice melter
- No uses advised against. Use only for intended applications

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: PICS Ltd
- Address of Supplier: Unit 4
  Red Shute Hill Ind Estate
  Hermitage
  Newbury
  Berkshire
  RG18 9QL
  UK
- Telephone: +44 (0) 1635 202224
- Email: Info@picsuk.com

1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 1635 202224
  (office hours only Mon– Fri 08:00 – 17:30)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification (EC 1272/2008)

- Physical hazards: Not classified.
- Health hazards: Eye Irrit. 2 – H319.
- Environmental hazards: Not classified.

2.2 Label elements

- Hazard pictograms:

- Signal word: Warning.
- Hazard statements: H319 causes serious eye irritation.
- Precautionary statements: P264 wash contaminated skin thoroughly after handling.
  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.

2.3 Other hazards

- This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition

3.2 Mixtures

Calcium Chloride	**60-100%**
CAS Number: 10043-52-4 EC Number: 233-140-8	

Classification
Eye Irrit. 2 – H319

The full text of hazards statements is displayed in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General information: Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
- Inhalation: Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
- Ingestion: Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosed tight clothing such as collar, tie or belt.
- Skin contact: Rinse with water.
- Eye contact: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
- Protection for 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: See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
- Inhalation: Prolonged inhalation of high concentrations may damage respiratory system.
- Ingestion: Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
- Skin contact: Prolonged contact may cause dryness of the skin.
- Eye contact: irritating to eyes.

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: The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
- 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

- Specific hazards: Containers can burst violently or explode when heated, due to excessive pressure build-up.
- Hazardous combustion products: Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3 Advice for firefighters

- Protective actions during firefighting: Avoid breathing fire gasses or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water to spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk to water pollution occurs, notify appropriate authorities.
- Special protective equipment for firefighters: Wear positive-pressure self-contaminated breathing apparatus (SCBA) and appropriate protective clothing. Firefighters clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions: No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do no tough or walk into spilled material.

6.2 Environmental precautions

- Environmental Precautions: Avoid discharge into drains or watercourses or onto the ground.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up: Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Neutralise with acid. Caution. May generate heat. Following dilution and neutralisation, discharge to the sewer with plenty of water may be permitted. The requirements of the local water authority must be complied with if contaminated water is flushed directly to the sewer. For waste disposal, see section 13.

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. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Usage precautions: Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.
- Advice on general occupational hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2 Conditions for safe storage, including any incompatibilities

- Storage precautions: Store away from incompatible materials (see section 10). Store away from the following materials: Acids. Keep only in the original container. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of a spillage. The storage area floor should be leak-tight, jointless and not absorbent.
- Storage class: Acid-reactive storage.

7.3 Specific end use(s)

- Specific end use(s) – The identified uses for this product are detailed in Section 12.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Ingredient comments: No exposure limits known for ingredient(s).

8.2 Exposure controls

- Protective equipment:

- Appropriate engineering controls: Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to us respiratory protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.
- Eye/face protection: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. 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. Frequent changes are recommended.
- Other skin and body protection: Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
- Hygiene measures: Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
- Respiratory protection: Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. 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.
- Environmental exposure controls: Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined
pH:	pH (concentrated solutions): 7-11
Melting point:	Not determined
Initial boiling point and range:	Not determined
Flash point:	Not determined
Evaporation rate:	Not determined
Evaporation factor:	Not determined
Flammability (solid, gas):	Not determined
Upper/lower flammability or Explosive limits:	Not determined
Other flammability:	Not determined
Vapour pressure:	Not determined
Vapour density:	Not determined
Relative density:	Not determined
Bulk density:	Not determined
Solubility(ies):	Soluble in water
Partition coefficient:	Not determined
Auto-ignition temperature:	Not determined
Decomposition Temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Not determined
Explosive under the influence of a flame	Not considered to be explosive
Oxidising properties:	Not determined
Comments:	Information given in applicable to the product as supplied

9.2 Other information

- Other information: Not relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

- Reactivity: see the other subsections of this section for further details.

10.2 Chemical stability

- Stability: Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3 Possibility of hazardous reaction

- Possibility of hazardous reactions: No potentially hazardous reactions known.

10.4 Conditions to avoid

- Conditions to avoid: there are no known conditions that are likely to result in a hazardous situation.

10.5 Incompatible materials

- Materials to avoid: Acid anhydrides. Acids. Phenols, cresols.

10.6 Hazardous decomposition products

- Hazardous decomposition products: Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - oral

- Summary: Based on available data the classification criteria are not met.

Acute toxicity – dermal

- Summary: Based on available data the classification criteria are not met.

Acute toxicity – inhalation

- Summary: Based on available data the classification criteria are not met.

Skin corrosion/irritation

- Summary: Based on available data the classification criteria are not met.
- Extreme pH: Moderate pH (> 2 and < 11.5).

Serious eye damage/irritation

- Summary: Causes serious eye irritation.

Respiratory sensitisation

- Summary: Based on available data the classification criteria are not met.

Skin sensitisation

- Summary: Based on available data the classification criteria are not met.

Germ cell mutagenicity:

- Summary: Based on available data the classification criteria are not met.

Carcinogenicity:

- Summary: Based on available data the classification criteria are not met.
- IARC Carcinogenicity: None of the ingredients are listed or exempt.

Reproductive toxicity:

- Summary: Based on available data the classification criteria are not met.

Specific target organ toxicity – Single exposure

- Summary: Based on available data the classification criteria are not met.

Specific target organ toxicity – repeated exposure
- Summary: Based on available data the classification criteria are not met.

Aspiration hazard
- Summary: Based on available data the classification criteria are not met.
- General information: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
- Inhalation: Prolonged inhalation of high concentrations may damage respiratory system.
- Ingestion: Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
- Skin contact: Prolonged contact may cause dryness of the skin.
- Eye contact: Irritating to eyes.
- Route of exposure: Ingestion inhalation skin and/or eye contact.
- Target organs: No specific target organs known.

Toxicological information on ingredients

Calcium Chloride

- Inhalation: Irritating to respiratory system.
- Skin contact: Irritating to skin.
- Eye contact: Irritating to eyes.
- Ecotoxicity: Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

SECTION 12: Ecological information

12.1 Toxicity

Acute aquatic toxicity
- Summary: based on available data the classification criteria are not met.

Chronic aquatic toxicity
- Summary: based on available data the classification criteria are not met.

Ecological information on ingredients
Calcium chloride
- Acute toxicity – aquatic invertebrates: EC_{50}, 48 hours: 144 mg/l mg/l, Daphnia magna

12.2 Persistence and degradability
- Persistence and degradability: The degradability of the product is not known.

Ecological information on ingredients
Calcium chloride
- Persistence and degradability: Will disperse as ions.

12.3 Bioaccumulative Potential
- Bioaccumulative potential: No data available on bioaccumulation
- Partition coefficient: Not determined.

Ecological information on ingredients
Calcium chloride
- Bioaccumulative potential: Not expected to bioaccumulate.

12.4 Mobility in soil
- Mobility: The product is water-soluble and may spread in water systems. The product is non-volatile.

Ecological information on ingredients
Calcium chloride
- Mobility: The product is soluble in water.

12.5 Results of PBT and vPvB assessment:
- Results of PBT and vPvB: This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients
Calcium chloride
- Results of PBT and vPvB assessment: Not applicable.

12.6 Other adverse effects

- Other adverse effects: None known.

Ecological information on ingredients

Calcium Chloride

- Other adverse effects: not known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- General information: The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. 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. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handing empties containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
- Disposal methods: Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

14.1 UN number

- 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 or MARPOL and the IBC Code

- Transport in bulk according to Annex II or MARPOL 73/78 and the IBC Code: Nor applicable.

SECTION 15: Regulatory information

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

- National regulations: Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Good and Use of Transportable Pressure Equipment. Regulations 2009 (SI 2009 No. 1348) (as amended) [“CDG 2009”]. EH40/2005 Workplace exposure limits.
- EU legislation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2 Chemical Safety Assessment

Inventories

- EU – EINECS/ELINCS: None of the ingredients are listed or exempt.

SECTION 16: Other information

List of abbreviations and acronyms used in this safety data sheet:

- ADR: European Agreement concerning the International Carriage of Dangerous Good by Road.
- AND: European Agreement concerning the International Carriage of Dangerous Good by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- CAS: Chemical Abstracts Service.
- ATE: Acute Toxicity Estimate.
- LC_{50}: Lethal Concentration to 50% of a test population.
- LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose)
- EC_{50}: 50% of maximal Effective Concentration.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms:

- Eye Irrit: Eye irritation

Classification procedures according to Regulation (EC) 1272/2008

- Eye Irrit. 2 – H319: Calculation method.

Training advice: Read and follow manufacturers recommendations. Only trained personnel should use this material.

--End of Safety Data Sheet--