



SAFETY DATA SHEET

THAW

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

1.1. Product identifier

Product name	THAW
Product number	C102
Internal identification	C102

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

Identified uses	De-icing granules
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1.3. Details of the supplier of the safety data sheet

Supplier	PAKEX (UK) PLC 1 PRIME POINT BESSEMER ROAD WELWYN GARDEN CITY HERTS AL7 1FE TEL: +44 (0)1707 384858 FAX: +44 (0)1707 332838 sales@pakexuk.com
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1.4. Emergency telephone number

Emergency telephone	+44 (0) 1707 384858
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements	NC Not Classified
Supplemental label information	EUH210 Safety data sheet available on request.

2.3. Other hazards

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

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

UREA		60-100%
CAS number: 57-13-6	EC number: 200-315-5	REACH registration number: 01-2119463277-33-XXXX
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -	

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

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Get medical attention. Do not induce vomiting. Rinse mouth thoroughly with water.
Skin contact	Rinse immediately with plenty of water.
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 if any discomfort continues.

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

Inhalation	Coughing, chest tightness, feeling of chest pressure.
Ingestion	May cause discomfort if swallowed.
Skin contact	Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin.
Eye contact	May cause discomfort.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrous gases (NO _x).
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5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
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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. Avoid contact with skin, eyes and clothing. Avoid inhalation of dust. Provide adequate ventilation. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment. Avoid discharge into drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Avoid generation and spreading of dust. 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. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid handling which leads to dust formation. Avoid inhalation of dust and contact with skin and eyes. Do not empty into drains. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 0°C and 30°C. Store in tightly-closed, original container in a dry and cool place.

Storage class Chemical storage.

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

8.2. Exposure controls

Protective

equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. 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.
Hygiene measures	Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Granules.
Colour	White.
Odour	Mild. Ammonia.
pH	pH (diluted solution): ~9.5 @ 10%w/w
Melting point	~ 132°C
Bulk density	1.33 kg/m ³
Solubility(ies)	Completely soluble in water.

9.2. Other information

Molecular weight	60.06
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Acids. Alkalis. Inorganic nitrates.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	Strong acids. Strong alkalis. Inorganic nitrates.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrous gases (NO _x).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	Dust may irritate the respiratory system.
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Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause dryness of the skin. Dust may cause slight irritation.
Eye contact	May cause discomfort.

Toxicological information on ingredients.

UREA

Acute toxicity - oral

Acute toxicity oral (LD₅₀) 14,300.0
mg/kg)

Species Rat
ATE oral
(mg/kg) 14,300.0

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Acute toxicity - fish Not determined.

Ecological information on ingredients.

UREA

Acute toxicity - fish LC₅₀ , 96 hours: >6810 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic plants NOEC, 192 hours: 47 mg/l, Freshwater algae

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

Ecological information on ingredients.

UREA

Persistence and degradability Expected to be readily biodegradable.

Biodegradation - Degradation 96%: 16 days

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Ecological information on ingredients.

UREA

Partition coefficient log Pow: -1.73

12.4. Mobility in soil

Mobility The product is soluble in water.

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.

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Ecological information on ingredients.

UREA

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

UREA

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods 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.

SECTION 14: Transport information

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard

class(es) Transport labels

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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

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EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. 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).
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	25/09/2015
Revision	2.1
Supersedes date	12/11/2012
Risk phrases in full	Not classified.

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