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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revision date / version: 03.07.2015 / 0003  
Replacing version dated / version: 22.09.2014 / 0002  
Valid from: 03.07.2015  
PDF print date: 02.06.2021  
Defrost Ganulate Icefree 25000 G  
Art.: 9042952

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**Safety data sheet  
according to Regulation (EC) No 1907/2006, Annex II**

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

**1.1 Product identifier**

**Defrost Ganulate Icefree 25000 G**

**Art.: 9042952**

Calcium chloride

Registration number (ECHA): --

Index: 017-013-00-2

EINECS, ELINCS, NLP, REACH-IT List-No.: 233-140-8

CAS: 10043-52-4

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

**Relevant identified uses of the substance or mixture:**

Pure chemical

Sector of use [SU]:

SU 0 - Other

SU 1 - Agriculture, forestry, fishery

SU19 - Building and construction work

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC 4 - Anti-Freeze and de-icing products

Process category [PROC]:

PROC19 - Manual activities involving hand contact

**Uses advised against:**

No information available at present.

**1.3 Details of the supplier of the safety data sheet**

BTI Befestigungstechnik GmbH & Co. KG

Salzstr. 51

74653 Ingelfingen

Tel.: +49 7940 141 141

Fax: +49 7940 141 9141

Email: info@bti.de

Homepage: www.bti.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

**1.4 Emergency telephone number**

**Emergency information services / official advisory body:**

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**Telephone number of the company in case of emergencies:**

+49 (0) 700 / 24 112 112 (BRC)

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## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.

### 2.2 Label elements

#### Labeling according to Regulation (EC) 1272/2008 (CLP)



Calcium chloride  
CAS: 10043-52-4, Index:017-013-00-2 EC: 233-140-8

#### Warning

H319-Causes serious eye irritation.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.  
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

No vPvB substance  
No PBT substance

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

<b>Calcium chloride</b>	
<b>Registration number (REACH)</b>	---
<b>Index</b>	017-013-00-2
<b>EINECS, ELINCS, NLP, REACH-IT List-No.</b>	233-140-8
<b>CAS</b>	10043-52-4
<b>content %</b>	
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Eye Irrit. 2, H319



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### 3.2 Mixtures

n.a.

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.  
The substances named in this section are given with their actual, appropriate classification!  
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!  
Never pour anything into the mouth of an unconscious person!

#### Inhalation

Supply person with fresh air and consult doctor according to symptoms.

The following may occur:

Irritation of the respiratory tract

#### Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

The following may occur:

Irritation of the skin.

#### Eye contact

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available. Consult medical specialist.

#### Ingestion

Rinse the mouth thoroughly with water.

Give water to drink.

Do not induce vomiting. Consult doctor immediately.

The following may occur:

Ingestion of large quantities:

Gastrointestinal disturbances

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

n.c.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Adapt to the nature and extent of fire.

The product does not burn.

#### Unsuitable extinguishing media

n.c.

### 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Hydrogen chloride



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### **5.3 Advice for firefighters**

Protective respirator with independent air supply.

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.

In case of fire and/or explosion do not breathe fumes.

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## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

Avoid build up of dust.

Do not breathe dust.

### **6.2 Environmental precautions**

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

### **6.3 Methods and material for containment and cleaning up**

Pick up mechanically and dispose of according to Section 13.

Avoid build up of dust.

### **6.4 Reference to other sections**

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

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## **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### **7.1 Precautions for safe handling**

#### **7.1.1 General recommendations**

Ensure good ventilation.

Avoid contact with eyes or skin.

Avoid build up of dust.

Do not breathe dust.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

#### **7.1.2 Notes on general hygiene measures at the workplace**

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Protect against moisture and store closed.

### **7.3 Specific end use(s)**

No information available at present.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ⓒ	Chemical Name	general dust limit	Content %:
	WEL-TWA: 10 mg/m <sup>3</sup> (inhal. dust), 4 mg/m <sup>3</sup> (respir. dust)	WEL-STEL: ---	---
	Monitoring procedures: ---		
	BMGV: ---	Other information: ---	

Ⓒ WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage. \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.  
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

#### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:



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With short-term contact:

Protective nitrile gloves (EN 374).

Minimum layer thickness in mm:

0,11

Permeation time (penetration time) in minutes:

> 480

With long-term contact:

Protective nitrile gloves (EN 374).

Minimum layer thickness in mm:

0,11

Permeation time (penetration time) in minutes:

> 480

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

On dust formation:

Fine-dust filter with Filter P2 (EN 143), code colour white.

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined
pH-value:	9-10,5 (10 %)
Melting point/freezing point:	772 °C



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Initial boiling point and boiling range:	>1600 °C
Flash point:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	n.a.
Upper explosive limit:	n.a.
Vapour pressure:	n.a.
Vapour density (air = 1):	Not determined
Density:	1,85-2,16 g/ml (20°C)
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	745 g/l
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not determined
<b>9.2 Other information</b>	
Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Not to be expected

The product has not been tested.

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur during storage and handling under normal conditions.

### 10.4 Conditions to avoid

See also section 7.

Moisture

### 10.5 Incompatible materials

See also section 7.

BF<sub>3</sub>

C<sub>3</sub>H<sub>6</sub>O

Water

Metals

Zinc

### 10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

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## SECTION 11: Toxicological information



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### 11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

Calcium chloride						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	3798	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	2630	mg/kg	Rat		
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:						Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:	NOAEL	169	mg/kg	Rat		Negative
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						breathing difficulties, coughing, itching, gastrointestinal disturbances, nausea and vomiting., drying of the skin.

### SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

**Calcium chloride**





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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	4630	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	144	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	2900	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.
Other information:	AOX		0	%			
Other information:	DOC						DOC-elimination degree (complexing organic substance) $\geq$ 80%/28d., n.a.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

06 03 99 wastes not otherwise specified

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

#### For contaminated packing material

Pay attention to local and national official regulations.



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Empty container completely.  
Uncontaminated packaging can be recycled.  
Dispose of packaging that cannot be cleaned in the same manner as the substance.

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## SECTION 14: Transport information

### General statements

14.1. UN number: n.a.

### Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Classification code: n.a.

LQ: n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

### Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Marine Pollutant: n.a.

14.5. Environmental hazards: Not applicable

### Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

### 14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Non-dangerous material according to Transport Regulations.

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## SECTION 15: Regulatory information

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

Observe restrictions:

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 0 %

### 15.2 Chemical safety assessment

There is no chemical safety report available.

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## SECTION 16: Other information

Revised sections: 1 - 16

These details refer to the product as it is delivered.



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Employee instruction/training in handling hazardous materials is required.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H319 Causes serious eye irritation.

Eye Irrit. — Eye irritation

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#### **Any abbreviations and acronyms used in this document:**

acc., acc. to according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

etc. et cetera

EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods



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incl. including, inclusive

IUCLID International Uniform Chemical Information Database

IUPAC International Union for Pure Applied Chemistry

LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable

n.av. not available

n.c. not checked

n.d.a. no data available

OECD Organisation for Economic Co-operation and Development

org. organic

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million

PVC Polyvinylchloride

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

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The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.