



# POWER DE-ICER

CODE : AD22C

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 06/11/2023 Version: 10.45

Generated : 06/11/2023

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : POWER DE-ICER  
UFI : A3P3-E0KU-P00J-TA45  
Product code : AD22C  
Type of product : Detergent

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

##### 1.2.1. Relevant identified uses

Intended for general public  
Main use category : Consumer use  
Use of the substance/mixture : Screenwash Additive (de-icing agent)

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### SELDEN RESEARCH LIMITED

STADEN LANE  
BUXTON  
DERBYSHIRE  
SK17 9RZ  
UNITED KINGDOM

Tel: 01298 26226  
Email: safety@selden.co.uk

##### SELDEN EUROPE B.V.

WATERMOLEN 13  
6229 PM  
MAASTRICHT  
NEDERLAND

Tel: +31 (0) 43 363 42 89  
Email: sds@selden.eu

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226

Serious eye damage/eye irritation, Category 2 H319

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

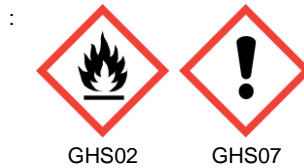
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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02

GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H226 - Flammable liquid and vapour.  
H319 - Causes serious eye irritation.

Precautionary statements (CLP)

: P102 - Keep out of reach of children.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground and bond container and receiving equipment.  
P241 - Use explosion-proof electrical, ventilating, lighting equipment.  
P242 - Use non-sparking tools.  
P243 - Take action to prevent static discharges.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear eye protection.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use foam to extinguish.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanol; ethyl alcohol substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-43	30 – 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319
ethanediol; ethylene glycol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	10 – 15	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propan-2-ol; isopropyl alcohol; isopropanol substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25	1 – 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H- and EUH-statements: see section 16

**SECTION 4: First aid measures****4.1. Description of first aid measures**

First-aid measures general	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Get medical advice/attention.

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

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam.
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**5.2. Special hazards arising from the substance or mixture**

Fire hazard	: Flammable liquid and vapour.
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**5.3. Advice for firefighters**

No additional information available

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

General measures	: Remove ignition sources.
<b>6.1.1. For non-emergency personnel</b>	
Emergency procedures	: Evacuate unnecessary personnel.
<b>6.1.2. For emergency responders</b>	
Protective equipment	: Use personal protective equipment as required.

**6.2. Environmental precautions**

Avoid release to the environment.

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

For containment : Collect spillage.  
 Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.  
 Precautions for safe handling : Keep away from sources of ignition - No smoking.  
 Hygiene measures : Do not eat, drink or smoke when using this product.

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

Technical measures : Does not require any specific or particular technical measures.  
 Storage conditions : Store in a well-ventilated place. Keep container tightly closed.  
 Incompatible products : Oxidizing agent. Strong acids. Strong bases.  
 Incompatible materials : Direct sunlight. Heat sources. Sources of ignition.  
 Special rules on packaging : Keep only in original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

ethanol; ethyl alcohol (64-17-5)	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Ethanol
OEL STEL	1000 ppm
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1000 ppm
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Isopropyl alcohol
OEL TWA [2]	200 ppm
OEL STEL	400 ppm
Regulatory reference	Code of Practice for the Chemical Agents Regulations 2018
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Propan-2-ol
WEL TWA (OEL TWA) [1]	999 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	400 ppm

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propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
WEL STEL (OEL STEL)	1250 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

No additional information available

### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

**Eye protection:**

Safety glasses. ISO 16321-1

#### 8.2.2.2. Skin protection

**Skin and body protection:**

Not required for normal conditions of use

**Hand protection:**

In case of repeated or prolonged contact wear gloves

**Other skin protection**

**Materials for protective clothing:**

Not required for normal conditions of use

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**

Not required for normal conditions of use

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
 Colour : Blue.

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Appearance	: Liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: $\geq 100$ °C
Flammability	: Not available
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: $\approx 24$ °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 10
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.96
Relative vapour density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

None under normal use.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified pH: 10
Serious eye damage/irritation	: Causes serious eye irritation. pH: 10
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

**propan-2-ol; isopropyl alcohol; isopropanol**

STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified

**ethanol; ethyl alcohol**

NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	> 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)

**ethanediol; ethylene glycol**

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

## 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

**ethanol; ethyl alcohol (64-17-5)**

LC50 - Fish [1]	14200 mg/l
EC50 - Other aquatic organisms [1]	5012 mg/l waterflea
EC50 - Other aquatic organisms [2]	275 mg/l
NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'

**propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)**

LC50 - Fish [1]	9640 mg/l
EC50 - Other aquatic organisms [1]	13299 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 1000 mg/l

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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### ethanol; ethyl alcohol (64-17-5)

Partition coefficient n-octanol/water (Log Pow)	-0.32
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#### propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

Partition coefficient n-octanol/water (Log Pow)	0.05
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

### 14.1. UN number or ID number

UN-No. (ADR)	: UN 1170
UN-No. (IMDG)	: UN 1170
UN-No. (IATA)	: UN 1170

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IMDG)	: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IATA)	: Ethanol solution
Transport document description (ADR)	: UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III, (D/E)
Transport document description (IMDG)	: UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III
Transport document description (IATA)	: UN 1170 Ethanol solution, 3, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3
	:



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**IMDG**

Transport hazard class(es) (IMDG) : 3  
 Danger labels (IMDG) : 3  
 :

**IATA**

Transport hazard class(es) (IATA) : 3  
 Danger labels (IATA) : 3  
 :

**14.4. Packing group**

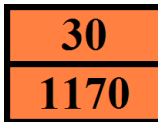
Packing group (ADR) : III  
 Packing group (IMDG) : III  
 Packing group (IATA) : III

**14.5. Environmental hazards**

Dangerous for the environment : No  
 Marine pollutant : No  
 Other information : No supplementary information available

**14.6. Special precautions for user****Overland transport**

Classification code (ADR) : F1  
 Special provisions (ADR) : 144, 601  
 Limited quantities (ADR) : 5I  
 Excepted quantities (ADR) : E1  
 Packing instructions (ADR) : P001, IBC03, LP01, R001  
 Mixed packing provisions (ADR) : MP19  
 Portable tank and bulk container instructions (ADR) : T2  
 Portable tank and bulk container special provisions (ADR) : TP1  
 Tank code (ADR) : LGBF  
 Vehicle for tank carriage : FL  
 Transport category (ADR) : 3  
 Special provisions for carriage - Packages (ADR) : V12  
 Special provisions for carriage - Operation (ADR) : S2  
 Hazard identification number (Kemler No.) : 30  
 Orange plates :



Tunnel restriction code (ADR) : D/E  
 EAC code : •2YE

**Transport by sea**

Special provisions (IMDG) : 144, 223  
 Limited quantities (IMDG) : 5 L  
 Excepted quantities (IMDG) : E1  
 Packing instructions (IMDG) : P001, LP01  
 IBC packing instructions (IMDG) : IBC03  
 Tank instructions (IMDG) : T2  
 Tank special provisions (IMDG) : TP1  
 EmS-No. (Fire) : F-E

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EmS-No. (Spillage) : S-D  
Stowage category (IMDG) : A

### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y344  
PCA limited quantity max net quantity (IATA) : 10L  
PCA packing instructions (IATA) : 355  
PCA max net quantity (IATA) : 60L  
CAO packing instructions (IATA) : 366  
CAO max net quantity (IATA) : 220L  
Special provisions (IATA) : A3, A58, A180  
ERG code (IATA) : 3L

### 14.7. Maritime transport in bulk according to IMO instruments

IBC code : Not applicable.

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)  
Contains no substance(s) listed on the REACH Candidate List  
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)  
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)  
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)  
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### 15.1.2. National regulations

##### United Kingdom

British National Regulations : Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),  
Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.  
Detergent Regulation (648/2004/EC).

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

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### Full text of H- and EUH-statements:

STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
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### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 3	H226	On basis of test data
Eye Irrit. 2	H319	Calculation method

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.