



POWER DE-ICER

Safety Data Sheet

Date of issue: 15/01/2019

Revision date: 15/01/2019

Version: 10.3

POWER DE-ICER

AD22C

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

1.1. Product identifier

Product form : Mixture
Product name : POWER DE-ICER
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 Fax: 01298 26540 Email: safety@selden.co.uk

1.4. Emergency telephone number

: Mon to Fri 8.30am to 5.00pm - 01298 26226

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 3 H226

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) : Warning
Hazard statements (CLP) : H226 - Flammable liquid and vapour.
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, lighting, ventilating equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P370+P378 - In case of fire: Use foam to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Safety Data Sheet

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) (DK, GB, IE, NL)	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	30 - 60	Flam. Liq. 2, H225
ethanediol; ethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1	10 - 15	Acute Tox. 4 (Oral), H302
propan-2-ol; isopropyl alcohol; isopropanol	(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-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 with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: 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.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

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.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

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.

Safety Data Sheet

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**

ethanol; ethyl alcohol (64-17-5)		
Denmark	Local name	Ethanol
Denmark	Grænseværdie (langvarig) (mg/m ³)	1900 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	1000 ppm
Ireland	Local name	Ethanol
Ireland	OEL (15 min ref) (ppm)	1000 ppm
Netherlands	Local name	Ethanol
Netherlands	Grenswaarde TGG 8H (mg/m ³)	260 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	1900 mg/m ³
Netherlands	Remark (MAC)	H
United Kingdom	Local name	Ethanol
United Kingdom	WEL TWA (mg/m ³)	1920 mg/m ³
United Kingdom	WEL TWA (ppm)	1000 ppm
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
Belgium	Limit value (mg/m ³)	500 mg/m ³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m ³)	1000 mg/m ³
Belgium	Short time value (ppm)	400 ppm
Denmark	Local name	Isopropylalkohol (2005)
Denmark	Grænseværdie (langvarig) (mg/m ³)	490 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	200 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	1000 mg/m ³
Ireland	Local name	Isopropyl alcohol
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (ppm)	400 ppm
Ireland	Notes (IE)	Sk
Netherlands	Grenswaarde TGG 8H (mg/m ³)	650 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	0 mg/m ³
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m ³)	999 mg/m ³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm

Safety Data Sheet

8.2. Exposure controls

Materials for protective clothing	: Not required for normal conditions of use
Hand protection	: In case of repeated or prolonged contact wear gloves
Eye protection	: Not required for normal conditions of use
Skin and body protection	: Not required for normal conditions of use
Respiratory protection	: Not required for normal conditions of use

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Blue.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 10
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: >= 100 °C
Flash point	: ≈ 24 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.96
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

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 additional information available

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : Not classified

Safety Data Sheet

Skin corrosion/irritation	: Not classified pH: 10
Serious eye damage/irritation	: Not classified 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
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information**12.1. Toxicity****propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)**

LC50 fish 1	9640 mg/l
EC50 other aquatic organisms 1	13299 mg/l EC50 waterflea (48 h)
EC50 other aquatic organisms 2	> 1000 mg/l IC50 algea (72 h) mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential**propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)**

Log Pow	0.14
---------	------

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. 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 / RID / IMDG / IATA / ADN

14.1. UN number

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

14.3. Transport hazard class(es)**ADR**

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

Safety Data Sheet

**IMDG**

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

**IATA**

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

**14.4. Packing group**

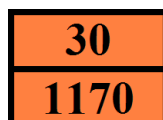
Packing group (ADR) : III
 Packing group (IMDG) : III
 Packing group (IATA) : III

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 :



Safety Data Sheet

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
 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. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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 REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list
 Contains no REACH Annex XIV substances

15.1.2. National regulations**Germany**

Reference to AwSV : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)
 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : ethanol; ethyl alcohol is listed
 SZW-lijst van mutagene stoffen : None of the components are listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : ethanol; ethyl alcohol is listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : ethanol; ethyl alcohol is listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : ethanol; ethyl alcohol is listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Safety Data Sheet

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
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
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.

SDS EU (EXPORT PREPARE)

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