

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Trade name : JANGRO DE-ICER
UFI : 3PTF-M0RP-G00F-9CKU
Product code : BG112-75
Type of product : Detergent

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

Main use category : Professional use
Use of the substance/mixture : Screenwash Additive (de-icing agent)

1.3. Details of the supplier of the safety data sheet**JANGRO LTD**

PARKLANDS 1A, 3RD FLOOR
LOSTOCK
BOLTON
BL6 4SD
UNITED KINGDOM

Tel: +44 (0) 1204 795 955
Email: enquiries@jangrohq.net

JANGRO LTD EUROPE

6-9 TRINITY STREET
DUBLIN 2
D02 EY47
EIRE

Tel: +353 (0) 1 617 7911
Email: enquiries@jangrohq.net

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+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	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

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP)



Signal word (CLP)

: Warning

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazard statements (CLP)	: H226 - Flammable liquid and vapour. H319 - Causes serious eye irritation.
Precautionary statements (CLP)	: 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

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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 substance(s) are 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

3.2. 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
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

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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.
For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
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.

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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

National occupational exposure and biological limit values

ethanol; ethyl alcohol (64-17-5)

Ireland - Occupational Exposure Limits

Local name	Ethanol
OEL STEL	1000 ppm

United Kingdom - Occupational Exposure Limits

Local name	Ethanol
WEL TWA (OEL TWA)	1920 mg/m ³
	1000 ppm

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

Ireland - Occupational Exposure Limits

Local name	Isopropyl alcohol
OEL TWA	200 ppm
OEL STEL	400 ppm
Regulatory reference	Code of Practice for the Chemical Agents Regulations 2018

United Kingdom - Occupational Exposure Limits

Local name	Propan-2-ol
WEL TWA (OEL TWA)	999 mg/m ³
	400 ppm
WEL STEL (OEL STEL)	1250 mg/m ³
	500 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

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8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Wear eye protection. Safety glasses. ISO 16321-1

Skin protection

Skin and body protection:

Not required for normal conditions of use

Hand protection:

In case of repeated or prolonged exposure : Chemical resistant gloves (according to European standard ISO 374-1 or equivalent)

Other skin protection

Materials for protective clothing:

Not required for normal conditions of use

Respiratory protection

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
Colour	: Blue.
Appearance	: Liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: $\geq 100\text{ }^{\circ}\text{C}$
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: $\approx 24\text{ }^{\circ}\text{C}$
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 characteristics	: Not applicable

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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 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.

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

ethanol; ethyl alcohol (64-17-5)	
LD50 oral rat	15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560
LD50 oral	10470 mg/kg bodyweight
LD50 dermal	15800 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	> 99999 mg/l

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral	4396 mg/kg bodyweight
LD50 dermal	12800 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	46600 mg/l

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

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

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

ethanol; ethyl alcohol (64-17-5)

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)
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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)
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ethanediol; ethylene glycol (107-21-1)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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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
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EC50 - Other aquatic organisms [1]	5012 mg/l waterflea
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EC50 - Other aquatic organisms [2]	275 mg/l
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NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'
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propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

LC50 - Fish [1]	9640 mg/l
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EC50 - Other aquatic organisms [1]	13299 mg/l waterflea
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EC50 - Other aquatic organisms [2]	> 1000 mg/l
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12.2. Persistence and degradability

Persistence and degradability	Rapidly degradable
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ethanol; ethyl alcohol (64-17-5)

Persistence and degradability	Rapidly degradable
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ethanediol; ethylene glycol (107-21-1)

Persistence and degradability	Rapidly degradable
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propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

Persistence and degradability	Rapidly degradable
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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

Regional waste regulation	: Dispose of in accordance with relevant local regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW, EC 2000/532)	: 20 01 29* - detergents containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

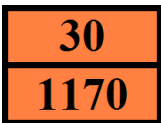
ADR	IMDG	IATA
14.1. UN number or ID number		
UN 1170	UN 1170	UN 1170
14.2. UN proper shipping name		
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution
Transport document description		
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III, (D/E)	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III	UN 1170 Ethanol solution, 3, III
14.3. Transport hazard class(es)		
3	3	3
		
14.4. Packing group		
III	III	III

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ADR	IMDG	IATA
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-E EmS-No. (Spillage): S-D	Dangerous for the environment: No
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	: •2Y

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
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.
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SECTION 15: Regulatory information

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

EU-Regulations

- CESIO recommendations : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
- Other information, restriction and prohibition regulations : Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 and all its amendments and modifications. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 and all its amendments and modifications. Detergent Regulation (EC 648/2004).

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Detergent Regulation (EC 648/2004)

Contains no ingredient(s) required to be listed according to the Detergent Regulation (648/2004).

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

United Kingdom

- British National Regulations : Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning 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 chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Transport information.

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Data sources

: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Detergent Regulation (EC 648/2004).

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
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
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.
H373	May cause damage to organs through prolonged or repeated exposure.

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.