SAFETY DATA SHEET

TS-PREMIXED

The safety data sheet is in accordance with 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)

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

Date issued	20.02.2014
Revision date	10.09.2021

1.1. Product identifier

Product name	TS-PREMIXED
Article no.	1476206, 1476208, 1476209

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

Use of the substance / mixture	Disinfectant. AISE-P314 - Surface disinfectant. Manual process.

1.3. Details of the supplier of the safety data sheet

Company name	Tandur h.f.
Office address	Hesthals 12
Postcode	110
City	Reykjavík
Country	ICELAND
Telephone number	00354 510 1200
Email	tandur@tandur.is
Website	www.tandur.is

1.4. Emergency telephone number

Emergency telephone	Telephone number: 112 Description: POISON CENTER EMERGENCY# Telephone number: (+354)-543-2222 Description: POISON CENTER EMERGENCY#

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Dam. 1; H318 Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 3; H412

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Didecyldimethylammonium chloride 1 - 5 % wt/wt
Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary statements	P264 Wash hands thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P362 Take off contaminated clothing. P332+P313 If skin irritation occurs: Get medical advice / attention. P321 Specific treatment (see section 4 on this label). P310 Immediately call a POISON CENTER or doctor / physician.

2.3. Other hazards

PBT / vPvB	This product does not contain any PBT or vPvB substances.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Didecyldimethylammonium chloride	CAS No.: 7173-51-5 EC No.: 230-525-2 Index No.: 612-131-00-6	Acute tox. 4; H302 Skin Corr 1B; H314 Aquatic Acute 1; H400	1 - 5 % wt/wt	
Propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	1 - 5 % wt/wt	

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Call a POISON CENTER or doctor/physician if you feel unwell. Show this SDS.
Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position

	comfortable for breathing. Get medical attention immediately!
Skin contact	Flush skin thoroughly with water. Get medical attention if irritation persists after washing.
Eye contact	Promptly wash eyes with plenty of water while lifting the eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. Continue flushing during transport to hospital.
Ingestion	Rinse mouth thoroughly. Do NOT induce vomiting. Drink a few glasses of water or milk. Get immediate medical advice/attention.
Recommended personal protective equipment for first aid responders	Use personal protective equipment as required. See further section 8.2

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

Information for health personnel	IF IN EYES: Remember to remove lenses if they are present. Ask patient. Continue eye rinsing/treatment. Call an eye specialist in all cases.
Acute symptoms and effects	See further section 11.1 under "Potential Acute Effects"

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Carbon dioxide or dry powder. Fight larger fires with water spray jet or alcohol-resistant foam

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Not known.

5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection. Wear protective gloves / protective clothing / eye protection / face protection.
Fire fighting procedures	Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Stop leak if safe to do so.
Personal protection measures	Wear protective gloves / protective clothing / eye protection / face protection.
Hazardous combustion products	Not known.
For emergency responders	Wear protective clothing as described in Section 8 of this safety data sheet. Call a POISON CENTER or doctor/physician if you feel unwell.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into drains, water courses or onto the ground. Collect and dispose of spillage as indicated in section 13.

6.3. Methods and material for containment and cleaning up

Cleaning method	Absorb in vermiculite, dry sand or earth and place into containers.
Containment	Store in a closed container.

6.4. Reference to other sections

Other instructions	See section 8 and 13 for further details.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Provide easy access to water supply and eye wash facilities.

Protective safety measures

Preventititve measures to protect the environment	Prevent the product to reach sewage water or drainage system undiluted or unneutralized. Collect spillage if possible.
Advice on general occupational hygiene	Private clothes and working clothes should be kept separately.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Keep in original container.

Conditions for safe storage

Requirements for storage rooms and vessels	Keep only in original container. Keep container tightly closed.
Storage temperature	Value: ~ 20 °C

7.3. Specific end use(s)

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Didecyldimethylammonium chloride	CAS No.: 7173-51-5	Limit value (8 h) : 999 mg/m3 **Limit value (short term)** Value: 1250 mg/m3	
Propan-2-ol	CAS No.: 67-63-0	Limit value (8 h) : 400 ppm Limit value (8 h) : 999 mg/m3 **Limit value (short term)** Value: 500 ppm **Limit value (short term)**	TWA Year: 2011

	Value: 1250 mg/m3

DNEL / PNEC

Substance	Propan-2-ol
PNEC	**Route of exposure:** Water **Value:** 140,9 mg/l **Reference:** Marine water **Route of exposure:** Sewage treatment plant STP **Value:** 2251 mg/l **Route of exposure:** Sediment **Value:** 552 mg/kg **Route of exposure:** Soil **Value:** 28 mg/kg **Route of exposure:** Water **Value:** 140,9 mg/l **Reference:** Freshwater

8.2. Exposure controls

Limitation of exposure on workplace	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Protective gloves and goggles are recommended. An eye wash bottle must be available at the work site.

Safety signs

Precautionary measures to prevent exposure

Instruction on measures to prevent exposure	Secure access of workers to safety information.
Organisational measures to prevent exposure	Avoid direct contact and/or splashes where possible. Train personnel.
Technical measures to prevent exposure	Avoid direct contact. Use through automatic spray or dosing systems. Cover open containers. Use safety glasses/goggles and protective clothing.

Eye / face protection

Eye protection	Use approved safety glasses, goggles or face shield. Safety glasses should have side shields.
Suitable eye protection	Safety glasses should have side shields.
Additional eye protection measures	Provide easy access to water supply and eye wash facilities.
Reference to relevant standard	EN 166

Hand protection

Hand protection	Chemical resistant gloves required for prolonged or repeated contact.
Suitable gloves type	Butyl rubber. Nitrile. Chloroprene rubber. Polyvinyl chloride (PVC). Rubber (natural, latex).
Reference to relevant standard	Chemical-resistant protective gloves (EN 374).

Respiratory protection

Respiratory protection	Personal protection is normally not required. If ventilation is inadequate and exposure to liquid particles cannot be avoided, wear appropriate breathing apparatus using A2B2+P3 filter (fulfilling EN 137/EN 138). Avoid breathing vapours, spray or mists.

Appropriate environmental exposure control

Environmental exposure controls	Avoid discharge into drains, water courses or onto the ground. See further section 13.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Clear liquid.
Colour	Colorless
Odour	Chemical. Isopropanol.
pH	Value: ~ 11 Temperature: ~ 20 °C
Density	Value: 1,0 g/ml Temperature: 20 °C
Solubility in water	Fully miscible.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stability	The mixture is stable under normal storage and use conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reactions known under normal storage and use conditions.

10.4. Conditions to avoid

Conditions to avoid	None known under normal storage and use conditions.

10.5. Incompatible materials

Materials to avoid	None in particular.

10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products.

SECTION 11: Toxicological information

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

Substance	Didecyldimethylammonium chloride
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** = 645 mg/kg **Animal test species:** Rat **Test reference:** OECD 401
Substance	Propan-2-ol
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** = 5050 mg/kg **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** ~ 12800 mg/kg **Animal test species:** Rabbit

Other information regarding health hazards

Inhalation	Spray mist irritates the respiratory system, and may cause coughing and difficulties in breathing.
Skin contact	May cause irritation.
Eye contact	May irritate and cause redness and pain. Risk of serious damage to eyes. Immediate first aid is necessary.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Sensitisation	No known effects.
Mutagenicity	No information available on mixture. However, studies have not shown any indication of mutagenicity of individual substances in the mixture.
Carcinogenicity, other information	No information or data available on mixture. However, there is no evidence of carciogenicity on individual substances in the mixture.
Reproductive toxicity	No information or data available on mixture. However, studies have not shown any indication of reproductive toxicity for individual substances in the mixture.

11.2 Other information

SECTION 12: Ecological information

12.1. Toxicity

Substance	Didecyldimethylammonium chloride
Aquatic toxicity, fish	**Value:** ~ 0,97 mg/l **Test duration:** 96 h **Species:** Danio Rerio **Method:** OECD 203
Substance	Propan-2-ol
Aquatic toxicity, fish	**Value:** ~ 9600 mg/l **Test duration:** 96 h
Substance	Didecyldimethylammonium chloride
Aquatic toxicity, algae	**Value:** ~ 0,031 mg/l **Test duration:** 72 h **Species:** Pseudokirchnerella subcapitata **Method:** OECD 201
Substance	Didecyldimethylammonium chloride
Aquatic toxicity, crustacean	**Value:** ~ 0,029 mg/l **Test duration:** 48 h **Species:** Daphnia magna **Method:** OECD 202
Substance	Propan-2-ol
Aquatic toxicity, crustacean	**Value:** ~ 1400 mg/l **Test duration:** 48 h

12.2. Persistence and degradability

Persistence and degradability, comments	No information available on mixture. However, individual substances are all classified as readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product does not contain any substances that are bioaccumulating. Therefore, the mixture is not expected to be bioaccumulating.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT assessment results	No data available on mixture. Contains no PBT or vPvB substances. See section 2.3
Substance	Didecyldimethylammonium chloride
PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
Substance	Propan-2-ol

PBT assessment results	This substance is not classified as PBT or vPvB.
vPvB evaluation results	No data available on mixture. Contains no PBT or vPvB substances. See section 2.3

12.6. Endocrine disrupting properties

12.7. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Avoid release to the environment. Dispose of waste and residues in accordance with local authority requirements.
Relevant waste regulation	Regulation no. 737/2003
Hazardous waste product	Avoid release to the environment.
Hazardous waste packing	Avoid release to the environment.
Product classified as hazardous waste	Yes
Packaging classified as hazardous waste	Yes
EWC waste code	EWC: 070601 aqueous washing liquids and mother liquors
National regulations	Regulation 184/2002 Regulation 786/1999
Other information	Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	3082
IMDG	3082
ICAO/IATA	3082

14.2. UN proper shipping name

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance ADR/RID/ADN	Quaternary alkyl ammonium chloride, Isopropyl alcohol
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance IMDG	Quaternary alkyl ammonium chloride, Isopropyl alcohol
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance ICAO/IATA	Quaternary alkyl ammonium chloride, Isopropyl alcohol

14.3. Transport hazard class(es)

ADR/RID/ADN	9
IMDG	9
ICAO/IATA	9

14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	Yes

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

ADR/RID Other information

Hazard No.	90

IMDG Other information

EmS	F-A, S-F

SECTION 15: Regulatory information

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

Legislation and regulations	This safety datasheet is in compliance with the following EU legislation and its adaptations - as far as applicable: Regulation 1907/2006 and later 750/2008 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Amendments on Annex II of the REACH regulation with EU regulation 453/2010. Regulation (EC) No. 1272/2008 on classificatioin, labelling and packaging of substances and mixtures which replaces EU legislations 67/548/EBE og 1999/45/EB and changes regulation No. 1907/2006.

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation.

	H318 Causes serious eye damage. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
Abbreviations and acronyms used	CLP: Classification, labelling and packaging GHS: Globally Harmonized System. DNEL: Derived No Effect Limit (afleidd áhrifaleysismörk). PBT: Persistent, Bioaccumulative and Toxic PNEC: Predicted No Effect Concentration vPvB: Very Persistent and very Bioaccumulative REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.
Information added, deleted or revised	Section 2: Applicable precautionary statements were added.
Revision responsible	Alfred Aðalsteinsson (M.Sc. Chemistry); email: alfred@tandur.is
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