SAFETY DATA SHEET

T-20

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	26.02.2014
Revision date	29.03.2021

1.1. Product identifier

Product name	T-20
Article no.	1476084, 1476086, 1476088

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

Use of the substance / mixture	Cleaning agent. Hard surface cleaner.
The chemical can be used by the general public	No
The chemical is used by general public only	No

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Corr. 1A; H314

2.2. Label elements

Hazard pictograms (CLP)

Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage.
Precautionary statements	P260 Do not breathe dust / fume / gas / mist / vapours / spray. P264 Wash hands thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER or doctor / physician. P321 Specific treatment (see on this label). P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P405 Store locked up. P501 Dispose of contents / container to a certified recipient of hazardous/toxic waste.

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
Tetrapotassium pyrophosphate	CAS No.: 7320-34-5 EC No.: 230-785-7	Eye Irrit. 2; H319	1 - 5 %	
Sodium metasilicate pentahydrate	CAS No.: 10213-79-3 EC No.: 2299129 REACH Reg. No.: 01-2119449811-37	Skin Corr 1B Eye Dam. 1 Met. Corr. 1	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 if any discomfort continues.
Skin contact	Flush skin thoroughly with water. If skin irritation occurs: Get medical advice/ attention.
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 medical attention immediately! Continue flushing during transport to hospital.
Ingestion	Rinse mouth thoroughly. Drink a few glasses of water or milk. Get immediate medical advice/attention.
Recommended personal protective equipment for first aid responders	Wear protective gloves and eye protection. See section 8.2

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

Information for health personnel	CORROSIVE: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Acute symptoms and effects	May cause severe eye damage. 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	Water spray, foam, dry powder or carbon dioxide.

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 release to the environment. Collect and dispose of spillage as indicated in section 13.

6.3. Methods and material for containment and cleaning up

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	Alkalis. Avoid contact with skin and eyes. Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Keep in original container. Store protected from acids.

Conditions for safe storage

Technical measures and storage conditions	Alkalis.
Requirements for storage rooms and vessels	Keep only in original container.
Advice on storage compatability	Alkalis.
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
Tetrapotassium pyrophosphate	CAS No.: 7320-34-5		

Sodium metasilicate pentahydrate	CAS No.: 10213-79-3

DNEL / PNEC

Substance	Tetrapotassium pyrophosphate
DNEL	**Group:** Worker **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 44 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 10,87 mg/m3
PNEC	**Route of exposure:** Sewage treatment plant STP **Value:** 50 mg/l **Route of exposure:** Water **Value:** 0,005 mg/l **Reference:** Marine water **Route of exposure:** Water **Value:** 0,05 mg/l **Reference:** Fresh water
Substance	Sodium metasilicate pentahydrate
DNEL	**Group:** Worker **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 6,22 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 1,55 mg/m3 **Group:** Worker **Route of exposure:** Long term (repeated) - Dermal - Systemic effect **Value:** 1,49 mg/kg bw/d **Group:** Consumer **Route of exposure:** Long term (repeated) - Oral - Systemic effect **Value:** 0,74 mg/kg bw/d **Group:** Consumer **Route of exposure:** Long term (repeated) - Dermal - Systemic effect **Value:** 0,74 mg/kg bw/d
PNEC	**Route of exposure:** Sewage treatment plant STP **Value:** 1000 mg/l **Route of exposure:** Water **Value:** 1 mg/l **Reference:** Marine water **Route of exposure:** Water **Value:** 7,5 mg/l **Reference:** Fresh water

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	Where possible: use through foam systems and 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.
Skin- / hand protection, short term contact	Nitril rubber: Penetration time: >= 30 min Material thickness: >= 0,4 mm
Skin- / hand protection, long term contact	Butylrubber: Penetration time: >= 480 min Material thickness: >= 0,7 mm
Suitable gloves type	Butyl rubber. Nitrile. Chloroprene rubber. Polyvinyl chloride (PVC). Rubber (natural, latex).
Thickness of glove material	Value: >= 0,4 mm
Reference to relevant standard	Chemical-resistant protective gloves (EN 374).

Skin protection

Skin protection (except hands)	Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

Respiratory protection	Under normal conditions of use respiration protection should not be required. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P2).

Appropriate environmental exposure control

Environmental exposure controls	Should not reach sewage or drainage system undiluted or unneutralized.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Clear liquid.
Colour	Straw.
Odour	Almost odourless.
pH	Status: In delivery state Value: > 12,5 Temperature: ~ 20 °C
Melting point / melting range	Comments: Not determined.
Boiling point / boiling range	Comments: Not determined.
Flash point	Comments: Not relavant. Contains no flammable material.
Vapour density	Comments: Not determined.
Relative density	Value: = 1,10 g/ml Temperature: ~ 20 °C
Solubility in water	Fully miscible.
Viscosity	Comments: Not determined.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known 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	Acid reactive.

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	Tetrapotassium pyrophosphate
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** > 1000 mg/kg **Animal test species:** Mouse **Type of toxicity:** Acute **Effect tested:** LC50 **Route of exposure:** Inhalation. **Duration:** 4 h **Value:** > 1,1 mg/l **Animal test species:** Rat
Substance	Sodium metasilicate pentahydrate
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** ~ 1152-1349 mg/kg bw **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LC50 **Route of exposure:** Inhalation. **Value:** > 2,06 g/m3 **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** > 5000 mg/kg bw

Other information regarding health hazards

Inhalation	May cause respiratory irritation.
Skin contact	Irritating to skin.
Eye contact	Corrosive. 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.
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	Sodium metasilicate pentahydrate
Aquatic toxicity, fish	**Value:** = 210 mg/l **Test duration:** 96 h **Species:** Brachydanio rerio
Substance	Tetrapotassium pyrophosphate
Aquatic toxicity, algae	**Value:** > 100 mg/l **Test duration:** 72 h
Substance	Sodium metasilicate pentahydrate
Aquatic toxicity, crustacean	**Value:** = 1700 mg/l **Test duration:** 48 h **Species:** Daphnia magna

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 expected to be bioaccumulating.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
Substance	Tetrapotassium pyrophosphate
PBT assessment results	Not relevant.
Substance	Sodium metasilicate pentahydrate
PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
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	3253
IMDG	3253
ICAO/IATA	3253

14.2. UN proper shipping name

ADR/RID/ADN	DISODIUM TRIOXOSILICATE
IMDG	DISODIUM TRIOXOSILICATE
ICAO/IATA	DISODIUM TRIOXOSILICATE

14.3. Transport hazard class(es)

ADR/RID/ADN	8
IMDG	8
ICAO/IATA	8

14.4. Packing group

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

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

ADR/RID Other information

Hazard No.	80

IMDG Other information

EmS	F-A, S-B

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)	H314 Causes severe skin burns and eye damage. H319 Causes serious eye irritation.
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	Liður 2: Viðeigandi varnaðarsetningum bætt við. Hættusetning breytt í H314 í staðinn fyrir H318 við endurskoðun innihaldsefna. Liður 3: innihaldsefni fjarlægð þar sem sum hver höfðu ekki áhrif á hættusetningu efnablöndunnar.
Version	5
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