

DERAST - ŻEL

Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: DERAST - ŻEL

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

Acidic product, designed for removing large quantities of rust, limescale and cement dripstone from the acidic-proof surfaces. Do not use on the enamelled surfaces and do not allow the surface to dry while it is covered with the working solution.

1.3 Details of the supplier of the safety data sheet:

TENZI Sp. z o.o.
Skarbimierzyce 20
72-002 Dołuje
tel. +48 91 3119777
fax. +48 91 3119779
E-mail address for a competent person responsible for SDS: technolog@tenzi.pl

1.4 Emergency telephone number:

+48 91 31 19 777 (mon. - fri. 8am - 4pm) or 112.

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008:

Skin Irrit. 2 H315 – Causes skin irritation.
Aquatic Chronic 3 H412 – Harmful to aquatic life with long lasting effects.
Met. Corr. 1 H290 – May be corrosive to metals.
Eye Dam. 1 H318 – Causes serious eye damage.

2.2. Label elements:
(According to 1272/2008/EC*)

Hazard symbols:



Signal words:
DANGER

Hazard statements:

H290 – May be corrosive to metals.
H315 – Causes skin irritation.
H318 – Causes serious eye damage.
H412 – Harmful to aquatic life with long lasting effects.

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Precautionary statements:

- 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.
P310 – Immediately call a POISON CENTER/doctor

2.3. Other hazards:

Substance does not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances:

Not applicable.

3.2. Mixtures:

Composition (according to: 648/2004/EC):

- < 10% hydrochloric acid
- < 5% cationic surfactants
- auxiliary substances not classified as dangerous

Identification	Hazardous ingredient/classification	Concentration
CAS: No data available WE: 231-595-7 Index: 017-002-01-X Registration: 01-2119484862-27-XXXX	Hydrochloric acid (30%) Met. Corr. 1 H290, Skin Corr. 1B H314, STOT SE 3 H335	< 10% (based on the content of active acid)
CAS: 25307-17-9 WE: 246-807-3 Index: Not applicable Registration: 01-2119510876-35-0000	Cationic surfactants Acute Tox. 4 H302, Skin Corr. 1B, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	< 2%

The full texts of H symbols and phrases are in section 16.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures:

Inhalation:

In case of inhalation poisoning symptoms (cough, dyspnea, dizziness) move the injured to fresh air. Keep him calm and warm. Get medical attention if symptoms persist.

Skin contact:

If product comes in contact with the skin, immediately remove all contaminated clothing and flush exposed area with large amounts of water. In case of skin changes or burns, get medical attention.

Eye contact:

Flush eyes with running water (at least 15 minutes) while keeping eyelids open. Get medical attention.

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Ingestion:

DO NOT induce vomiting. Give lots of water to drink. DO NOT give any neutralizing agents. Immediately get medical attention and show this SDS or label.

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

Irritant. May cause upper respiratory tract irritation, cough, dyspnea and sore throat.

Skin:

Irritant. After long-term exposure, it may cause skin damage.

Eyes:

Causes serious eye damage.

Ingestion:

Irritant. May cause burns in mouth, throat and stomach, nausea and vomiting.

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

Get medical attention.

Fresh water and eye-wash preparations must be available on the worksite.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media:**Suitable extinguishing media:**

Sand, foam, water, carbon dioxide.

Unsuitable extinguishing media:

There are not any known extinguishing media that you shouldn't use.

5.2. Special hazards arising from the substance or mixture:

Product is non-flammable. In case of fire, there is a chance that the product will produce hydrogen chloride and chlorine. Produces hydrogen in contact with metal (danger of explosion).

5.3. Advice for firefighters:

Firefighters should wear self-contained breathing apparatus and full protective clothing. In case of fire, warn the people nearby and evacuate unprotected and untrained personnel from hazard area. Notify relevant emergency services. If possible, remove the containers away from the influence of fire and high temperature. Water may be used to keep fire-exposed containers cool until fire is out. The after burning residues should be removed

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:**For non-emergency personnel:**

Self-contained breathing apparatus, protective chemical-proof gloves (0.11 mm thick), safety glasses.

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For emergency responders:

Protective clothes, protective chemical-proof gloves (0.11 mm thick), self-contained breathing apparatus, safety glasses. Avoid skin and eye contact. Provide proper ventilation.

6.2. Environmental precautions:

Avoid discharge into drains, watercourses or onto the ground at all costs. Call local authorities in case of environmental pollution.

6.3. Methods and material for containment and cleaning up:

In case of unexpected release of the substance into the environment, inform appropriate services about the emergency and remove any source of ignition. Prevent spills from entering sewers, surface water or groundwater. If it is possible, confine and contain the spill by closing the flow of the liquid, plug the damaged container and put it into leakproof wrapping. For a larger spill, make a dike around the outside edges of the spill and use absorbent materials (sand, sawdust, minced limestone). Store clean-up materials for disposal as hazardous waste. Decontaminate polluted area with water. Products containing hydrochloric acid must be neutralized with alkaline substances (sodium carbonate, sodium hydroxide, whitewash).

6.4. Reference to other sections:

See section 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Be careful when working with this product.
Use personal protection recommended in section 8
Mix only with water. DO NOT mix with any other chemical substances.
People with skin allergy or respiratory system problems should not have contact with this product.
Avoid risk – read this instruction sheet carefully before using the product.
After usage, keep container tightly closed and keep it away from unauthorized people.
Use only adequate ventilation to avoid inhalation poisoning.

7.2. Conditions for safe storage, including any incompatibilities:

Store in a tightly closed, original plastic container. Store this product in a dry environment that will be maintained at 5°C - 30°C temperature with a good ventilation system and an easy washable, nonabsorbable alkaline resistant floor. DO NOT expose the product to sunlight and keep away from heat, sparks, flame and source of ignition.

7.3. Specific end use(s):

No data available.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. Control parameters:

Please check any national occupational exposure limit values in your country.

NDS/NDSch/NDSP values for individual chemical substances (according to SDS or Chemical Safety Report):

Hydrochloric acid (data for highly concentrated substance):

NDS: 5 mg/m³
NDSch: 10 mg/m³
NDSP: not identified.

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Cationic surfactants (data for highly concentrated substance):

NDS, NDSCh, NDSP: not identified.

DNEL/PNEC values for individual chemical substances (according to SDS or Chemical Safety Report):

Hydrochloric acid (data for highly concentrated substance):

DNEL:

Group: workers, Exposure time: short-term, Exposure route: inhalation, Type of effect: local effect,
Group: workers, Exposure time: long-term, Exposure route: inhalation, Type of effect: local effect,

Value: 15 mg/m³
Value: 8 mg/m³

PNEC:

Aqua (fresh water): 0.036 mg/l
Aqua (marine water): 0.036 mg/l
Sediment (fresh water): no effect is expected
Sediment (marine water): no effect is expected
Intermittent release: 0.045 mg/l
Soil: 0.36 mg/l

Cationic surfactants (data for highly concentrated substance):

DNEL:

Group: workers, Exposure time: long-term, Exposure route: dermal, Type of effect: systemic effect,
Group: workers, Exposure time: long-term, Exposure route: inhalation, Type of effect: systemic effect,
Group: consumers, Exposure time: long-term, Exposure route: dermal, Type of effect: systemic effect,
Group: consumers, Exposure time: long-term, Exposure route: inhalation, Type of effect: systemic effect,
Group: consumers, Exposure time: long-term, Exposure route: ingestion, Type of effect: systemic effect,

Value: 0.25 mg/kg
Value: 1.76 mg/m³
Value: 0.179 mg/kg
Value: 0.621 mg/m³
Value: 0.179 mg/kg

PNEC:

Aqua (fresh water): 0.000214 mg/l
Aqua (marine water): 0.000021 mg/l
Sediment (fresh water): 1.692 mg/kg of dry mass
Sediment (marine water): 0.1692 mg/kg of dry mass
Sewage treatment plant: 1.5 mg/l
Soil: 5 mg/kg of dry mass

NOTE: When the concentration of substance is known, personal protective equipment should be chosen based on substance concentration in a workplace, exposure time and operations performed by the employee. In emergency situations, if substance concentration in the workplace is unknown, personal protection of highest class level should be used.

8.2. Exposure controls:

RESPIRATORY PROTECTION:

In case of insufficient ventilation, wear suitable respiratory equipment - masks with gas and vapour protection.

HAND PROTECTION:

Protective gloves resistant to acidified chemical substances.
0.11 mm thick.

EYE/FACE PROTECTION:

Safety glasses

SKIN PROTECTION:

Protective clothes, protective boots.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

Appearance:	Maroon coloured gel
Odour:	Characteristic (irritant)
Odour threshold:	No data available
pH:	1 ± 1
Melting point:	No data available
Freezing point:	No data available
Initial boiling point:	No data available
Boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Upper explosive limit:	No data available
Lower explosive limit:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1.033 ± 0.020 g/cm ³
Solubility:	
A) Water:	soluble
B) Organic solvent:	No data available
Partition coefficient N-Octan:	No data available
Partition coefficient Water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Min. 120 sec. (Ford cup, 4 ± 0,015 mm diameter)
Explosive properties:	No data available
Oxidising properties:	No data available

9.2. Other information:

Refractive index: 19.2% Brix* ± 5%

* - Degrees Brix is the content of an aqueous solution. One degree Brix is 1 gram of sucrose in 100 grams of solution and represents the strength of the solution as percentage by weight (%w/w).

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

Reacts with alkali and oxidizers.

10.2 Chemical stability:

Stable under recommended storage conditions (see section 7).

10.3 Possibility of hazardous reactions:

Contact with light metals produces hydrogen and gas with highly explosive properties.
Reacts exponentially with strong alkali with emanating warmth.

10.4 Conditions to avoid:

Avoid heavily warmed rooms without ventilation and long-term exposure to sunlight.

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10.5 Incompatible materials:

Materials to avoid: aluminum and other metals, amines, carbides, hydrides, fluorine, alkaline metals, potassium permanganate, strong alkali, acid salts.

10.6 Hazardous decomposition products:

In case of decomposition, it emanates hydrogen chloride, chlorine and hydrogen.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

ACUTE TOXICITY:

Inhalation: may cause irritation of the upper respiratory tract, coughing, sore throat and dyspnoea.

Skin contact: after long-term exposure, it may cause skin damage.

Eye contact: causes serious eye damage.

Digestive system: May cause burns in mouth, throat and stomach and may even cause nausea and vomiting.

ATEmix = 63 291 (acute toxicity, orally)

DETAILS OF PARTICULAR COMPONENTS (according to substance's SDS):

Hydrochloric acid (data for highly concentrated substance):

LD50: 238-277 mg/kg (rat, orally)
LD50: > 5010 mg/kg (rabbit, dermal)
LC50: 4701 ppm/0.5h (rat, inhalation)

Very harmful after swallowing. Causes burns in mouth, throat and stomach.

Corrosive effects on skin.

Serious and irreversible eye damage. Risk of blindness.

No allergic effects.

No mutagenic effects.

No carcinogenic effects.

Corrosive effects on respiratory system.

Cationic surfactants (data for highly concentrated substance):

LD50: > 300-2000 mg/kg (rat, orally) (OECD 401, M-10)

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity:

Data for the mixture ingredients:

Hydrochloric acid (data for highly concentrated substance):

In aquatic environment, effect of hydrogen chloride is dependent on the pH. It fully dissociates to ions in the water and in the effect, it doesn't cause any harm. Substance in this form doesn't have any sediment deposition properties.

LC50: 20.5 mg/l/96h (fish) (pH 3.25-3.5)

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EC50:	0.45 mg/l/4l	(daphnia)	
LC50:	0.45 mg/l/4l	(daphnia)	
EC50:	0.76 mg/l/72h	(algae)	(pH 4.7)
NOEC:	0.364 mg/l/72h	(algae)	(pH 5.0)
EC50:	0.73 mg/l	(algae, fresh water)	(OECD 201)
LC50:	0.73 mg/l	(algae, fresh water)	

Cationic surfactant (data for highly concentrated substance):

LC50:	> 0.1 – 1 mg/l/96h	(fish)
EC50:	> 0.01-0.1 mg/l/48h	(daphnia)

Data based off the tests on similar product:

EC50:	0.01-0.1 mg/l/72h	(algae, pseudokirchneriella subcapitata)	OECD 201
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M faktor acute = 10

M faktor chronic = 1

12.2. Persistence and degradability:

The surfactants contained within the product comply with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents.

Data for the mixture ingredients:

Hydrochloric acid (data for highly concentrated substance):

Easily biodegradable in water and air.

Substance rapidly dissolves and subsequently dissociates in water.

Cationic surfactant (data for highly concentrated substance):

Easily biodegradable.

OECD 301 D >60%

12.3. Bioaccumulative potential:

Hydrochloric acid (data for highly concentrated substance):

It's not bioaccumulative.

Cationic surfactant (data for highly concentrated substance):

It's not predicted that it is bioaccumulative.

12.4. Mobility in soil

Hydrochloric acid (data for highly concentrated substance):

In accordance to soil's buffer capacity, ion hydrogen concentration will be neutralized by organic and non-organic substances that are present in soil, or there may be sudden decrease of pH in the place of leakage.

Cationic surfactant (data for highly concentrated substance):

Not mobile at all.

12.5. Results of PBT and vPvB assessment:

This substance/mixture does not meet the PBT and vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects:

May pose danger to biological treatment plants (decreases pH).

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SECTION 13. DISPOSAL CONSIDERATIONS

RESIDUES AND WASTES:

DO NOT mix with other liquid wastes.

DO NOT empty into sewage system. Product should be totally used up according to its description.

If it's impossible to do so, dispose of this material and its container at hazardous or special waste collection point.

13.1. Waste treatment methods:

Contaminated containers should be completely emptied. Several times rinse the container promptly after emptying. Empty container can be stored in containers for collection of plastic packaging, or can be delivered to specialized company for recycling.

Disposal should be in accordance with the national/international regulations.

SECTION 14. TRANSPORT INFORMATION

TRADE NAME: DERAST - ŻEL

- 14.1. UN Number: 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Hydrochloric acid).
14.3. Transport hazard class(es): 8.
14.4. Packing group: II
14.5. Environmental hazards: No
14.6. Special precautions for user: For more details see Sections 6 and 8.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: No data available.

WARNING LABELS

SECTION 15. REGULATORY INFORMATION

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

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)

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

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

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DIRECTIVE 2008/112/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 amending Council Directives 76/768/EEC, 88/378/EEC, 1999/13/EC and Directives 2000/53/EC, 2002/96/EC and 2004/42/EC of the European Parliament and of the Council in order to adapt them to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

COMMISSION REGULATION (EU) No 758/2013 of 7 August 2013 correcting Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

DIRECTIVE 2014/27/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 amending Council Directives 92/58/EEC, 92/85/EEC, 94/33/EC, 98/24/EC and Directive 2004/37/EC of the European Parliament and of the Council, in order to align them to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents

REGULATION (EC) No 1336/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 amending Regulation (EC) No 648/2004 in order to adapt it to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

REGULATION (EC) No 273/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 February 2004 on drug precursors.

15.2. Chemical safety assessment

For mixture:

A Chemical Safety Assessment has not been carried out.

For following mixture substances:

Hydrochloric acid A Chemical Safety Assessment has been carried out.

Cationic surfactant: A Chemical Safety Assessment has been carried out.

SECTION 16. OTHER INFORMATION

Information above is based on current knowledge of product in its current form.

All data are presented in order to take into account safety requirements priority and not to guarantee special properties of the product. If product usage conditions are not under manufacturer control, responsibility for safe use lies with the person that uses them. The employer is obliged to inform all employees, who have contact with the product, about the risk and safety measures specified in the data sheet. Safety data presented above were prepared based on safety characteristics of substances used by the producer to compose the product and based on regulations for handling dangerous substances and their preparation. Classification of chemical mixture was done with calculation methods, based on the content of hazardous ingredients.

The full list of symbols and H phrases from Section 2 and 3:

Aquatic Chronic 1 – Hazardous to the aquatic environment - Chronic Hazard, category 1.

Aquatic Chronic 3 – Hazardous to the aquatic environment - Chronic Hazard, category 3.

Aquatic Acute 1 – Hazardous to the aquatic environment - Acute Hazard, category 1.

Acute Tox. 4 – Acute toxicity, category 4.

Met.Corr 1 – Substance/Mixture is corrosive to metals, category 1

Skin Irrit. 2 – Causes skin irritation, category 2.

Eye Dam. 1 – Serious eye damage, category 1.

Eye Irrit. 2 – Causes serious eye irritation, category 2.

Skin Corr. 1B – Corrosive to skin, category 1B.

STOT SE 3 – Specific target organ toxicity - Single exposure STOT, category 3.

H290 – May be corrosive to metals.

H302 – Harmful if swallowed.

H314 – Causes severe skin burns and eye damage.

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H315	– Causes skin irritation.
H318	– Causes serious eye damage.
H319	– Causes serious eye irritation.
H335	– May cause respiratory irritation.
H400	– Very toxic to aquatic life.
H410	– Very toxic to aquatic life with long lasting effects.
H412	– Harmful to aquatic life with long lasting effects.

More information on the product can be found on the specific technical data sheet which is available on www.tenzi.pl

Training:

Course participants should be trained about how to handle this hazardous substance, about safety and work hygiene. Drivers should also be trained and obtain proper certification in accordance with the ADR requirements.

Expiry date:

36 months from the production date (if product is stored according to the producent recommendations)

Changes compared to the previous version:

- section 14

Updated cards versions are now available on www.tenzi.pl

This Safety Data Sheet contains 11 pages. Changes in the content by unauthorized people is prohibited.