MATERIAL SAFETY DATA SHEET

PODCHLORYN S

Date of releasing: 11.11.2025
Date of revision: -
Version EN: 1.0

Material Safety Data Sheet in accordance with WE 1907/2006 of 18.12.2006 – REACH and 2020/878 of 18.06.2020.

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

1.1 Product identifier

PODCHLORYN S
Substance name: Sodium hypochlorite
REACH No.: 01-2119488154-34-0022
Index No.: 017-011-00-1
CAS: 7681-52-9
EC: 231-668-3

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

Identified applications:

Formulation (SN2)
Industrial use of sodium hypochlorite (SN3) as an intermediate
Use of sodium hypochlorite (SN4) in the textile industry (SN4)
Industrial use in the treatment of wastewater, cooling water, and heating water (SN5)
Industrial use in the pulp and paper industry (SN6)
Industrial use as a cleaning agent (SN7)
Professional use as a cleaning agent (SN8)
Consumer uses (SN9)
Biocidal use: drinking water treatment – biocidal product type PT2, PT4, PT5 in accordance with Annex V to Regulation (EU) No. 582/2012 (BPR), in accordance with the applicable national permit No. 4413/11 (issued for category I, groups 2, 4, 5)

Advised against applications: other than above.

1.3 Details of the supplier of the safety data sheet.

Distributor:

TOMCHEM Sp. z o.o.
95-050 Konstantynów Łódzki
ul. Niesięcin 5A
tel. 42 683-11-83
tel/fax.; 42-636-43-18

1.4 Emergency telephone number: 112 (general emergency phone)

SECTION 2. Hazards identification.

2.1 Classification of the substance or mixture:

Classification and labelling have been determined in accordance with Regulation (EC) 1272/2008 (as amended).
Product has been classified as hazardous in accordance with Regulation (EC) 1272/2008.

Met. Corr. 1; H290
Skin Corr. 1B; H314
Eye Dam. 1; H318
Aquatic Acute 1; H400
Aquatic Chronic 1; H411

2.2 Label elements:

Pictogram:

Signal word: Danger

Hazard statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

P310 Immediately call a POISON CENTER or doctor/physician.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Additional phrases:

EUH031 Contact with acids liberates toxic gas.

2.3 Other hazards:

Annex XIII of REACH Regulation – Criteria for identifying persistent, bioaccumulative and toxic substances (PBT) and very persistent and very bioaccumulative substances (vPvB) – not contain >0.1%.
Substances with endocrine disrupting properties (in accordance with the criteria of Commission Delegated Regulation (EU) 2017/2100, Commission Regulation (EU) 2018/605) – not contain >0.1%.

SECTION 3. Composition/information on ingredients

3.2 Mixtures.

Product identificator	Amount [%]	Hazard class and category codes	Hazard statement codes and supplementary statements	Specific concentration limit, M-factor, Acute toxicity estimate ATE
Sodium chlorate CAS: 7681-52-9 WE: 231-668-3 Index No: 017-011-00-1 REACH No: 01-2119488154-34-0022	13,7-16,9	Skin Corr. 1B Eye Dam. 1 Aquatic Acute 1 Aquatic Chronic 2	H314 H318 H400 H410 EUH031	 M=10 M=1 EUH031: ≥ 5%
Sodium carbonate CAS: 497-19-8 WE: 207-838-8 Index No: 011-005-00-2 REACH No: 01-2119485498-19-xxxx	max. 2	Eye Irrit. 2	H319	
Sodium hydroxide* CAS: 1310-73-2 WE: 215-185-5 Index No: 011-002-00-6 REACH No: 01-2119457892-27-xxxx	max. 2	Met.Corr. 1 Skin Corr. 1A	H290 H314	Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit.2; H319: 0,5 % ≤ C < 2 %

Full text of H phrases in section 16.

*substance with a specific OEL value.

SECTION 4. First aid measures.

4.1 Description of first aid measures.

In case of skin contact:

Remove all contaminated clothing, wash skin with plenty of water. Apply a sterile dressing to the burned area. Do not use any neutralizing agents. Contact a physician.

In case of eye contact:

Flush eyes with plenty of water for several minutes (approximately 15), holding eyelids wide open. Avoid strong water jets due to the risk of corneal damage. Contact a doctor immediately.

In case of inhalation:

If dizziness or nausea occurs, remove injured person to fresh air. If no improvement occurs quickly, seek medical advice. If shortness of breath occurs, administer oxygen.

In case of swallowing:

Rinse mouth immediately. Give plenty of water to drink. Do not induce vomiting (risk of perforation), contact a doctor immediately. Do not give anything by mouth to an unconscious person.

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

No information available.

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

Decision on the action is made by the doctor after assessing the injured person's condition.

SECTION 5. Firefighting measures.

5.1 Extinguishing media:

Suitable extinguishing media: Dry chemical, carbon dioxide (carbon dioxide extinguisher), sand, or earth. Use extinguishing methods appropriate to the surrounding conditions.

Inappropriate extinguishing media: Strong water jets.

5.2 Special hazards arising from the substance or mixture:

During a fire high temperatures release toxic decomposition products including chlorine and chlorine dioxide. Decomposition products may include the following materials: halogenated compounds, metal oxides. Due to its strong oxidizing properties, contact with many organic substances, hydrogen, and powdered metals poses a fire and explosion hazard. Non-flammable liquid. A fire in the surrounding area may release hazardous fumes. Containers exposed to fire or high temperatures may explode. Cool them with water from a safe distance and if possible remove them from the danger area. Notify the surrounding area of the fire evacuate all persons not involved in rescue operation from the danger area and alert plant emergency services, the Emergency Medical Services (CPR) (tel. 112), the State Fire Service (tel. 998 in Poland), or the Police (tel. 997 in Poland). Cool containers exposed to fire or high temperatures with water and if possible remove them from the danger area.

5.3 Advice for firefighters:

Cool containers in the fire zone with a water spray and if possible remove them from the danger area. Note: Do not allow water to enter the interior of the container. In case of a fire in an enclosed space wear protective clothing and a compressed air breathing apparatus. Do not allow extinguishing water to enter surface water, groundwater, or sewage systems. Do not remain in the danger area without appropriate gas-tight chemical protective clothing and a self-contained breathing apparatus with compressed air.

SECTION 6. Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures.

For non-emergency personnel: Notify the appropriate services of the incident. Remove anyone not involved in the emergency response from the hazard area. Avoid contact with the released liquid. Do not inhale vapours.
For emergency responders: Ensure adequate ventilation and use personal protective equipment.
Appropriate protective clothing should be selected for the workplace depending on the concentration and amount of hazardous substances. In emergency situations wear gas-tight clothing that protects against chemicals and a self-contained breathing apparatus. If possible remove source of the leak (close liquid flow, seal it and place damaged container in an airtight emergency chamber). As an emergency precaution isolate leak or spill area within a minimum radius of 50 meters and stay upwind of the incident. Avoid direct contact with the released substance.

6.2 Environmental precautions.

Limit release of product into sewage, water, and soil. Secure the spill area and if possible protect any leaks. Notify the appropriate services. Pump any sodium chlorate(I) collected in embankments and depressions into airtight containers and transport for neutralization. Sprinkle small amounts of spilled liquid with non-flammable sorbent or other absorbent material (earth, sand), collect in a sealed container, and flush the contaminated surface with water.

6.3 Methods and material for containment and cleaning up.

Prevent spreading and remove by collecting on non-flammable absorbent material (sand, sawdust, diatomaceous earth, universal absorbent), place contaminated material in appropriately marked containers for disposal in accordance with applicable regulations.

6.4 Reference to other sections.

Product waste disposal – see section 13. Personal protective equipment – see section 8.

SECTION 7. Handling and storage.

7.1 Precautions for safe handling.

Avoid contact with eyes. Work in accordance with health and safety regulations: do not eat, drink, or smoke in the workplace, wash hands after use and remove contaminated clothing and protective equipment before entering eating areas. Work under an exhaust hood and avoid inhaling vapours.

7.2 Conditions for safe storage, including any incompatibilities.

Warehouse type: separate general chemical storage area; with emergency mechanical ventilation; non-absorbent, alkali-resistant, easily washable floor with a slope towards drains, with a separate sewage system; internal water supply system; dry, cool. Fireproof warehouse, with mechanical ventilation, without heating (temperature not exceeding 250°C). Local exhaust ventilation with an enclosure around the gas emission area into the air as well as general ventilation of the room, is required. Local ventilation intake openings at or below the work surface. General ventilation vents at the top of the room and near the floor. Store containers in a single layer. SEVESO substance: class E1
Threshold quantities of the substance determining the classification of the facility as:
• facility with an increased risk of a major industrial accident: 100 [Mg]
• facility with a high risk of a major industrial accident: 200 [Mg]
Shared storage: with no other hazard class.
Types of transport packaging: polyethylene (HDPE) or polyvinyl chloride (PVC) containers, externally reinforced with glass fiber (GFR), steel tanks with an internal layer of rubber or glass fiber

7.3 Specific end use(s).

Uses as described in section 1.2.
Active substance in biocidal products, biocidal product.

SECTION 8. Exposure controls/personal protection.

8.1 Control parameters:

Ensure adequate ventilation.

Maximum allowable concentration values:

Regulation of the Minister of the Family, Labour and Social Policy of 24 June 2024 on the maximum permissible concentrations and intensities of factors harmful to health in the working environment (Journal of Laws item 1017, as amended).

Chemical name and CAS number	NDS [mg/m^3]	NDSCh [mg/m^3]	NDSP [mg/m^3]	Notes: labeling of substances with the notation "skin"
Sodium hydroxide [CAS: 1310-73-2]	0,5	1	-	-

DNEL and PNEC values.

Based on the chemical safety assessment conducted for the registration dossier and risk management of the substance's use, the following dose levels for exposure via various routes without causing an adverse effect in humans (DNEL) were determined:
For workers and the general population (inhalation):
- acute, short-term, chronic exposure DNEL: 3.1 mg/ m^3
- acute, short-term, local exposure DNEL: 3.1 mg/ m^3
- long-term, chronic exposure DNEL: 1.55 mg/ m^3
- long-term, local exposure DNEL: 1.55 mg/ m^3

For workers and the general population (dermal):
- long-term, local exposure DNEL: 0.5%

For the general population (oral):
- long-term DNEL: 0.25 mg/kg body weight/day

The PNEC (Predicted No Effect Concentration) was also determined for aquatic environment:
- for drinking water PNEC: 0.21 µg/l
- for marine water PNEC: 0.042 µg/l
- for water (intermittent release) PNEC: 0.26 µg/l
- for water transferred to a sewage treatment plant: PNEC: 0.03 µg/l

PNEC for living organisms by oral route: 11.1 mg/kg food

8.2 Exposure controls:

Appropriate engineering controls: general room ventilation and exhaust ventilation are essential.

Respiratory protection.

Avoid inhaling product vapours. If the OEL for ingredients is exceeded in the work environment use individual respiratory protection – a mask or half-mask complete with a filter and a type B or universal (class 2) vapour absorber compliant with the EN 141 standard.

Hand protection.

Use chemical-resistant protective gloves made of PVC or equivalent compliant with the EN-PN 374:2005 standard.
Glove material:
Choosing the right gloves depends not only on the material but also on the brand and quality, which vary between manufacturers. Resistance of the glove material can be determined after testing. Exact degradation time of the gloves must be determined by the manufacturer.
Suggested material type: natural rubber, polychloroprene rubber (neoprene), polyvinyl chloride. Performance levels for penetration resistance: Breakthrough time > 60 minutes. Material thickness 1,2 mm.

Eye protection.

Wear safety glasses or face mask (compliant with EN 166).

Body protection.

Use protective work clothing (compliant with EN 344) – wash regularly.

Do not allow it to spread in the environment and enter sewers and watercourses.

SECTION 9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties.

Physical state	liquid
Colour	yellow
Odour	sharp, choking
Melting point/freezing point	-28,9°C / -17°C
Boiling point or initial boiling point and boiling range	no data available
Flammability	substance is not flammable
Lower and upper explosion limit	not applicable - does not pose a risk of explosion on its own
Flash point	no data available
Auto-ignition temperature	it is not spontaneously combustible
Decomposition temperature	25°C
pH	>11
Kinematic viscosity	no data available
Solubility	6,4mPa.s
Partition coefficient n-octanol/water (log value)	complete solubility in water
Vapour pressure	-3,42 at.
Density and/or relative density	2500Pa
Relative vapour density	1,3 +/- 0,001g/cm^3
Particle characteristics	no data available

9.2 Nie dotyczy

Explosives	not applicable
Flammable gases	not applicable
Aerosols	not applicable
Oxidising gases	not applicable
Gases under pressure	not applicable
Flammable liquids	not applicable
Flammable solids	not applicable
Self-reactive substances and mixtures	not applicable
Pyrophoric liquids	not applicable
Self-heating substances and mixtures	not applicable
Substances and mixtures, which emit flammable gases in contact with water	not applicable
Oxidising liquids	not applicable
Oxidizing solids	not applicable
Organic peroxides	not applicable

Corrosive to metals	May be corrosive to metals.
Desensitised explosives	not applicable

SECTION 10. Stability and reactivity.

10.1 Reactivity:

Reacts with acid to generate heat and release chlorine gas. Strongly oxidizing. Corrosive to most metals, especially when exposed to moisture. Reacts explosively with hydrogen, powdered metals, and many organic substances. Sodium hypochlorite decomposes upon exposure to:
- heating
- contact with acids
- sunlight

10.2 Chemical stability:

Product is unstable. It decomposes easily releasing toxic oxidizing substances (oxygen is released at 25°C, chlorine at 35°C, and chlorine dioxide at 100°C).

10.3 Possibility of hazardous reactions:

Substances that react dangerously with sodium hypochlorite: flammable materials, strong acids, reducing agents, organic compounds, amines, ammonium salts, cellulose, metals.

10.4 Conditions to avoid:

Avoid temperatures (above 25°C), direct sunlight, hot surfaces, and open flames. Protect from moisture.

10.5 Incompatible materials:

Product reacts violently with acids, producing toxic gases. Light metals: zinc, tin, aluminum, and their alloys react with the release of hydrogen. Heavy metals: nickel, chromium, manganese, and iron accelerate the decomposition of sodium hypochlorite.

10.6 Hazardous decomposition products:

In contact with incompatible materials, in conditions of higher temperature, light or contamination, product decomposes to form: chlorine, chlorine dioxide.

SECTION 11. Toxicological information.

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

Toxokinesis, metabolism, and penetration. Sodium hypochlorite (I) dissociated in water occurs in various forms depending on the environmental pH. In biological systems it exists in equilibrium in the following forms: HOCl and ClO- at pH 6 to 8. Free chlorine is released at pH below 4. Product reacts vigorously with organic molecules, cells, and tissues, releasing halogenated organic compounds. Very little data exists on skin and respiratory penetration. Due to the significant polarity of the substance only slight dermal absorption is assumed. Exposure through the respiratory system is limited due to the low vapor pressure over aqueous solutions. Animal studies have shown that after oral exposure, the HOCl form is absorbed and excreted as chlorine in urine (approximately 40% of the administered dose after 96 hours).

a)	acute toxicity	Based on available data, the classification criteria are not met. Toxicological data: Oral Studies: OECD Guideline 401 (Acute Oral Toxicity) Animals: rats (Wistar) Concentration of the substance: 12,5% w/w Estimated dose: LD50: 1100 mg/kg expressed as active chlorine. Dermal: Studies: OECD Guideline 403 (Acute Inhalation Toxicity) Animals: male/female albino rabbits

		Concentration of the substance: 12,5% w/w Dose: 7.5; 10.4, 14,43, 20 g/kg Observation period: 14 days Estimated dose: LD50: 20000 mg/kg as active chlorine Inhalation: Studies: Guideline 403 (Acute Inhalation Toxicity) Animals: male albino rats Substance concentration: 10,5% w/w Exposure time: 1 hour Estimated dose: LD50: 10500 mg/kg as active chlorine
b)	skin corrosion/irritation	Causes severe skin burns and eye damage. Dermal: Test: (Acute Dermal Irritation / Corrosion) Animals: Rabbits and guinea pigs Concentration: 5% w/w Dose: 0,5 mg Observation time: 1 hour, 4 hours, 24 hours, 48 hours Result: Corrosive
c)	serious eye damage/irritation	Causes severe skin burns and eye damage. Animals: rabbits and guinea pigs. Concentration: 5% w/w Dose: 0,5 mg Observation time: 24 h, 48 h, 72 h. Result: irritating effect
d)	respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
e)	germ cell mutagenicity	Based on available data, the classification criteria are not met.
f)	carcinogenicity	Based on available data, the classification criteria are not met.
g)	reproductive toxicity	Based on available data, the classification criteria are not met.
h)	STOT-single exposure	Based on available data, the classification criteria are not met. Product is irritating to the respiratory organs (lungs) after a single exposure at a concentration above 20% w/w of active chlorine.
i)	STOT-repeated exposure	Based on available data, the classification criteria are not met.
j)	aspiration hazard.	Based on available data, the classification criteria are not met.

11.2 Information on other hazards.

Substances with endocrine disrupting properties (in accordance with the criteria of Commission Delegated Regulation (EU) 2017/2100, Commission Regulation (EU) 2018/605) – not contain >0.1%.

SECTION 12. Ecological information.

12.1 Toxicity:

Very toxic to aquatic life with long-lasting effects.
Do not allow to enter groundwater, sewers, or watercourses.
Animals: fish:
Species: Lepomis macrochirus (freshwater)
Exposure time: 96 h
Dose: LC50: 0,06 mg/l
Animals: fish:

Species: Coho salmon (Oncorhynchus kisutch), coho salmon (marine salmon)
Exposure time: 96 h
Dose: LC50: 0,032 mg/l
Conclusion: FOR THE CHEMICAL SAFETY ASSESSMENT, the following values were used: LC50 = 0,06 mg/l (for freshwater) and LC50 = 0.032 mg/l (for marine water). Animals: invertebrates: Daphnia magna (freshwater)
Exposure time: 48h
Estimated dose: EC50 = 0,141 mg/l
Animals: invertebrates
Species: Cerodaphnia dubia
Exposure time: 48h
Estimated dose: EC50 = 0,035 mg/l
Species: Myriophyllum spicatum
Exposure time: 4 days
Estimated dose: ErC50 = 0,1 – 0,4 mg and NOEC = 0,02 mg/l
Animals: fish
Species: Menidia Peninsulae (saltwater)
Exposure time: 28 days
Estimated dose: NOEC: 0,04 mg/l (freshwater)
Animals: Algae: Periphyton (freshwater)
Exposure time: 7 days
Estimated dose: NOEC: 0,0021 mg/l
Conclusions: The following range was adopted for the classification and assessment of environmental risks: 0,01 < LC50 < 0,1 mg/l
Based on this, an M-factor of 10 was estimated.
Product meets the criteria for aquatic toxicity (acute effect) and chronic toxicity category 2.

12.2 Persistence and degradability:

Degradation coefficient in water: 0,0475 (1,14 h)
Degradation coefficient in soil: Not applicable
Degradation coefficient in aquatic sediment: Not applicable
Degradation coefficient in air: 114,6
Sodium chlorate undergoes hydrolysis in water. It is not possible to determine the biodegradation coefficient in soil and sediment because sodium chlorate is an inorganic substance. Degradation in air is primarily due to photolysis and oxidation.

12.3 Bioaccumulative potential:

Does not meet the criteria: octanol/water partition coefficient – log Kow = - 3,42

12.4 Mobility in soil:

Does not meet the criteria: calculated adsorption coefficient log KOC = from -2,97 to 1,12

12.5 Results of PBT and vPvB assessment:

Product does not meet the PBT and vPvB criteria.

12.6 Endocrine disrupting properties:

Product and its constituents/additives/impurities do not contain constituents considered to have endocrine-active properties according to Article 57(f) of REACH, Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentrations of 0,1% or greater.

12.7 Other adverse effects:

No data available.

SECTION 13. Disposal considerations.

13.1 Waste treatment methods.

Waste disposal should be in accordance with applicable law. The waste should be classified under code 06 07 04* (solutions and acids). In case of a sodium hypochlorite spill given its strong oxidizing properties and hazard classification small amounts of the

substance can be neutralized with an aqueous solution of sodium bicarbonate or an aqueous solution of sodium thiosulfate. Collect liquid using appropriate absorbents in closed packaging/containers, preferably made of polyethylene or polyvinyl chloride (this will result in waste code 15 02 02*). Packaging waste containing residues of or contaminated with hazardous substances should be classified under waste code 15 01 10*. Any sodium hypochlorite (waste code 06 07 04*) waste generated should be selectively stored until the appropriate quantity is collected in a designated storage area disposed of or recovered at the facility's own facilities based on available permits or transferred directly to an authorized waste collector for disposal or recovery. Prevent the generated waste from entering soil, surface water, or groundwater.

Law dated 8 January 2013 on waste. (Journal of Laws 2013 item 21 as amended).
Law dated 13 June 2013 on the management of packaging and packaging waste. (Journal of Laws 2013 item 888 as amended).
Regulation of the Minister of Climate of January 02, 2020 on the waste catalog (Journal of Laws 2020 item 10 as amended).

SECTION 14. Transport information.

14.1 UN number or ID number.

UN 1791

14.2 UN proper shipping name.

HYPOCHLORITE SOLUTION

14.3 Transport hazard class(es).

8

14.4 Packing group.

II

14.5 Environmental hazards.

Yes

14.6 Special precautions for user.

Always transport in closed containers that are upright, labeled and secured.

14.7 Maritime transport in bulk according to IMO instruments.

No information available.

SECTION 15. Regulatory information.

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

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),
Commission Regulation (EU) 2020/878 of 18 June 2020 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 1272/2008 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 (REACH)
Law dated 24 October 2011 on the transport of hazardous materials (Journal of Laws 227 item 1367 of 2011, as amended),
Government Statement of 6 March 2025 on the entry into force of the amendments to Annexes A and B to the Agreement concerning the international carriage of dangerous goods by road (ADR), done at Geneva on 30 September 1957.
Law dated 8 January 2013 on waste. (Journal of Laws 2013 item 21 as amended)
Law dated 13 June 2013 on the management of packaging and packaging waste. (Journal of Laws 2013 item 888 as amended),
Announcement of the Minister of Health of 2 March 2015 on the announcement of the consolidated text of the Regulation of the Minister of Health on the labelling of packaging of hazardous substances and hazardous mixtures and certain mixtures (Journal of Laws 2015, item 450)
Law dated 25 February 2011 on chemical substances and their mixtures (Journal of Laws 2011 No. 63 item 322, as amended),

Law dated 26 June 1974 Labour Code (consolidated text: Dz.U. 21 item 94 of 1998 as amended),
Regulation of the Minister of Family, Labour and Social Policy of 24 June 2024 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Item 1017 with later amendments).
Regulation of the Minister of Climate of 2 January 2020 on the waste catalogue (Journal of Laws 2020, item 10).

15.2 Chemical safety assessment.

A chemical safety assessment was conducted for this product.
Annex XIV of the REACH Regulation – List of substances subject to authorisation: not applicable
SVHC substances – Candidate list of substances of very high concern awaiting authorisation: not applicable
Annex XVII of the REACH Regulation – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: not applicable

SECTION 16. Other information.

H phrases:

H290 – May be corrosive to metals.
H314 – Causes severe skin burns and eye damage.
H315 – Causes skin irritation.
H318 – Causes serious eye damage.
H335 – May cause respiratory irritation.
H319 – Causes serious eye irritation.
H400 – Very toxic to aquatic life.
H410 – Very toxic to aquatic life with long lasting effects.
H411 – Toxic to aquatic life with long lasting effects.
EUH031 – Contact with acids liberates toxic gas.

Description of abbreviations, acronyms and symbols used:

Met. Corr. 1 – Substance or mixture corrosive to metals
Skin Corr. 1A – Skin corrosion/irritation
Skin Corr. 1B – Skin corrosion/irritation
Skin Irrit. 2 – Skin corrosion/irritation
Eye Dam. 1 – Serious eye damage/eye irritation
Eye Irrit. 2 – Serious eye damage/eye irritation
STOT SE 3 – Specific target organ toxicity — single exposure
Aquatic Acute 1 – Hazardous to the aquatic environment
Aquatic Chronic 1 – Hazardous to the aquatic environment
NDS – Maximum allowable concentration
NDSP – Maximum allowable ceiling concentration
NDSCh – Maximum allowable momentary concentration.
DNEL – Level of exposure to a substance above which humans should not be exposed.
PNEC – concentration of chemical which marks the limit at which below no adverse effects of exposure in ecosystem are measured.
LC50 - (lethal concentration) - median lethal concentration, a statistically determined concentration of a substance, after exposure to which 50 percent of the organisms (exposed to the substance) can be expected to die during the exposure or during a specified contractual post-exposure period.
LD50 - (lethal dose) - medial lethal dose, the statistically determined size of a single dose of a substance, after administration of which 50% of exposed test organisms can be expected to die.
EC50 - (effective concentration) - medial effective concentration, statistically calculated concentration that induces in the environmental medium the specified effect in 50% of the experimental organisms under specified conditions
NOEC (no observed effects concentration) - the highest concentration for which there is no statistically or biologically significant increase in the frequency or severity of the effects of the substance in the test organisms relative to the control sample.
vPvB - Very persistent and very bioaccumulative substance
PBT - persistent, bioaccumulative and toxic substances
ADR – European agreement on the road transport of hazardous goods.
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
IMDG – International Maritime Dangerous Goods Code

IATA – Regulation on the transport of dangerous goods issued by the International Air Transport Association

Trainings:

Before starting work with the product it is mandatory to subject employees to EHS training in connection with the presence of chemical factors in work environment. Conduct, document and familiarize employees with the results of the occupational risk assessment at the work station related to the presence of chemical factors.

SOURCE MATERIALS:

Annex to Regulation (EU) 2020/878 of 18 June 2020.
Regulations mentioned in section 15 of the MSDS.

Changes to the previous version:

Section	Description

Product mentioned above, introduced into the market by ANWIL S.A. under the name Podchloryn S, has been registered as a biocidal product in accordance with permit no. 4413/11 issued by the Office for Registration of Medicinal Products, Medical Devices and Biocidal Products.

The information contained in the safety data sheet applies only to the product listed in title. Data contained in safety data sheet should be treated only as an help for safe use of the product. Since conditions of storage, transport and use are beyond our control they cannot constitute a guarantee in the legal sense. In each case the statutory provisions and any rights of third parties must be observed. Safety data sheet does not constitute an assessment of hazards in the workplace. The product should not be used for purposes other than those specified in section 1 without prior consultation with TOMCHEM Sp. z o.o.

End of document.