


SAFETY DATA SHEET according to Regulation (EU) 2020/878 of 18 June 2020		
EVAPORATED VACUUM SALT - CURING MIX - SODIUM CHLORIDE		
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SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1. Product identifier	Product name: EVAPORATED VACUUM SALT - CURING MIX - SODIUM CHLORIDE CAS: 7647-14-5 EC: 231-598-3
1.2. Relevant identified uses of the substance or mixture and uses advised against	Relevant identified uses: Product intended for the food industry. Used for the curing of processed meat and fish products. Uses advised against: Not for direct consumption.
1.3 Details of the supplier of the safety data sheet	Inowrocławskie Kopalnie Soli SOLINO Spółka Akcyjna ul. Świętego Ducha 26 a 88-100 Inowrocław, Poland tel.: +48 242569460 E-mail: solino@solino.pl E-mail: sylwia.rzetelna@solino.pl
1.4. Emergency telephone number	+48 242569764 (07:00 ÷ 15:00) European emergency number: 112

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	Classification according to Regulation (EC) No 1272/2008: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
2.2. Label elements	Labeling according to Regulation (EC) No 1272/2008 Signal word: none Pictograms: none Hazard statements none Precautionary statements none Additional information: none
2.3. Other hazards	This substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. This substance does not have endocrine disrupting properties.

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SECTION 3: Composition/information on ingredients**3.1 Substances**

Name of substance	Identifier	% weight
Sodium chloride	Index --- CAS 7647-14-5 EC 231-598-3	min 99
Pollution		
Sodium nitrite	Index 0007-010-00-4 CAS 7632-00-0 EC 231-555-9	0.5 – 0.6
Lead	Index --- CAS 7439-92-1 EC 231-100-4	max. 0.0001
Arsenic	Index 033-001-00-X CAS 7440-38-2 EC 231-148-6	0.00005
Cadmium (non-pyrophoric)	Index 048-002-00-0 CAS 7440-43-9 EC 231-152-8	0.000005
Mercury	Index 080-001-00-0 CAS 7439-97-6 EC 231-106-7	0.000003
Additionally product contain:		
Water (in 105 °C)	maks.1,2	
Anti-caking agent E 536 (K4[Fe(CN)6])	maks. 0,002 %	
Chemical formula:	NaCl	
Structural formula:	Na ⁺ Cl ⁻	

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation**

Remove person to fresh air and keep comfortable for breathing.

Ensure warmth and calm.

Provide medical assistance if necessary.

Ingestion

Do not induce vomiting.

Rinse mouth.

If unconscious – do not give the person anything to swallow.

Transport the injured person to a hospital if necessary.

Eye contact

Remove contact lenses.

Rinse contaminated eyes with lukewarm water for 10-15 minutes with the eyelids rolled back. Make the upper eyelid overlap the lower one from time to time.

Provide medical assistance if necessary.


Skin contact

Remove contaminated clothing immediately.

Clean contaminated skin, wash with plenty of water, then wash with water and mild soap.

If skin irritation persists, consult a doctor.

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

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High concentrations of particulate matter substance may cause mechanical irritation to skin, eyes and respiratory tract. Ingestion of large amounts may cause nausea and vomiting.

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

Symptomatic treatment.

First aid supplies should be available on the workplace premises.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Fire-fighting foam, carbon dioxide CO₂, fire-extinguisher powders, dispersed water

Unsuitable extinguishing media

Do not direct dense jets of water onto the surface of a burning product.

5.2. Special hazards arising from the substance or mixture

Combustion products

In case of fire, the following can be released: Hydrogen chloride gas, Sodium oxides.

Explosive mixture

Not applicable

5.3. Advice for firefighters

Use standard firefighting methods for extinguishing chemical fires.

Use water to cool containers exposed to high temperatures, and if possible, remove them from the area affected.

Use water spray jets to disperse vapours.

Fire-fighter protective equipment

Full personal protective equipment.

Self-contained breathing equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with eyes and skin. Wear appropriate protective equipment. Remove all sources of ignition. Keep all persons not equipped with personal protection equipment away.

In case of a discharge of a significant volume of the mixture, warn its users and order all bystanders to leave the contaminated area.

6.2. Environmental precautions

Prevent environmental contamination.

Protect drains.

In case of serious contamination of soil, watercourse or sewage system, notify the appropriate authorities.

6.3. Methods and material for containment and cleaning up

Secure any damaged packaging.

Ventilate the area affected and avoid inhaling vapours.

For larger amounts of the substance, collect it with industrial vacuum cleaners. Keep in suitable, closed containers for disposal.

Avoid rising dust.

Rinse the contaminated surface with plenty of water.

6.4. Reference to other sections

See Section 8 for information on personal protection

See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Recommendations for handling the mixture

Provide adequate ventilation.
Avoid contact with eyes and skin.
Avoid generating dust.
Avoid inhaling dust.

General industrial health and safety regulations

Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Replace contaminated clothing.
Wash contaminated clothing before reusing.

7.2. Conditions for safe storage, including any incompatibilities

Storage rooms must be ventilated.
Keep container tightly closed.
Keep only in the original container.
Keep away from sunlight, as well as heat and ignition sources.
Do not store together with foodstuffs and animal feed.
Protect against moisture.
Read the material safety data sheet.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace

Other non-toxic industrial dust - total dust	10 mg/m ³ TWA
Lead and its inorganic compounds - as a Pb	0.05 mg/m ³ TWA
Arsenic and arsenic compounds except arsine (as As)	0.1 mg/m ³ – (UK EH40/2005 Workplace exposure limits)
Cadmium and cadmium compounds except cadmium oxide fume, cadmium sulphide and cadmium sulphide pigments (as Cd)	0.025 mg/m ³ – (UK EH40/2005 Workplace exposure limits)
Mercury and divalent inorganic compounds including mercuric oxide and mercuric chloride (measured as mercury)	0.02 mg/m ³ – (UK EH40/2005 Workplace exposure limits)

Maximum concentrations in biological material (DSB):

Sodium nitrite	Methemoglobin (MetHb)	urine	2 %
Lead and inorganic lead compounds	Lead	blood	400 µg/l
	ZPP zinc protoporphyrin	blood	700 µg/l
	delta-aminolevulinic acid	urine	8 mg/l
Arsenic	Arsenic	urine	35 µg/l
Cadmium	Creatinine	blood	10 µg/g
	Cadmium	blood	5 µg/l
Mercury	Creatinine	urine	35 µg/g

8.2. Exposure controls

Appropriate engineering controls

Workstations and storage rooms must be well ventilated to keep the dust/vapour concentrations in the air below their limit values.

Individual protection measures

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Eye or face protection

Use safety goggles compliant with the EN 166 standard.

Eye wash bottle with clean water or eye washers must be provided near the work area.

Skin protection



Hand protection

In case of danger, use chemical-resistant protective gloves compliant with the EN 374 standard.

Select glove material based on breakthrough time, rate of penetration and degradation.

It is recommended to change gloves regularly and immediately replace them if they have any signs of wear, damage (tears, holes) or their appearance changes (colour, flexibility, shape).

Body protection

The type of protective equipment must be selected based on the quantity and concentration of hazardous substances in the given work environment.

Respiratory protection

In case of hazard due to the mixture vapours levels exceeding allowable levels in the air (e.g. due to ventilation failure), wear respiratory protection equipment

Use dust masks with filters compliant with the EN 149 standard when exposed to excessive dust.

Environmental exposure controls

Do not discharge into drains and groundwater.

General health and safety guidelines

Follow good personal hygiene practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid, fine crystalline, salty taste
Colour:	White to gray
Odour:	Flavorless
Melting point/freezing point:	ok. 800.7 - 801°C (Sodium chloride)
Boiling point or initial boiling point and boiling range:	ok. 1413 - 1465°C (Sodium chloride)
Flammability:	Non-flammable substance
Lower and upper explosion limit:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	ok. 801°C
pH:	6,0 - 8,0 (1 % solution /20°C)
Kinematic viscosity:	No data available
Solubility:	in water: 357 g/l (0 °C), 360 g/l (20 °C), 391 g/l (100 °C) Soluble in glycerol, ethylene glycol, and formic acid, less in ethanol, methanol - 14.9 g / l, in liquid ammonia - 21.5 g / l /
Partition coefficient n-octanol/water (log value):	Not applicable
Vapour pressure:	Ok. 1.3 mm Hg w 865°C (Sodium chloride)
Density and/or relative density:	Ok. 2.165 - 2.17 g/cm ³ (Sodium chloride)
Relative vapour density:	No data available

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Particle characteristics:

No data available

9.2. Other information

Information with regard to physical hazard classes

No data available

Other safety characteristics

In water, it is corrosive to most metals

SECTION 10: Stability and reactivity

10.1. Reactivity

The substance is not chemically reactive if stored and used under proper conditions.

10.2. Chemical stability

Under normal storage and use of the substance is chemically stable.

10.3. Possibility of hazardous reactions

Do not occur

10.4. Conditions to avoid

Avoid sources of ignition, heat, electrical sparks. High temperature (under fire conditions and high temperature (> 801°C) may occur Hazardous Decomposition Products: Chlorine, hydrogen chloride, sodium oxide). Moisture (substance may become lumpy).

10.5. Incompatible materials

Avoid contact with Bromine trifluoride, lithium.

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

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

Acute toxicity:

Based on available data, the classification criteria are not met.

Sodium chloride (CAS No. 7647-14-5)

LD₅₀ (rat): 3000 mg / kg

LD₅₀ (oral, mouse): 4000 mg / kg

LDL₀ (oral, rabbit): 8 g / kg

LDL₀ (subcutaneous guinea pig): 2160 mg / kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

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Routes of exposure:

Inhalation, ingestion, skin contact, eye contact.

Local effects:

Contact with skin:

Dust may cause slight irritation. It can be irritating to the damaged skin.

Eye contact:

Salt dust may cause slight redness and itching eyes.

Direct contact with eyes may cause mild irritation, redness and pain (for concentrations higher than the concentration of saline - 0.9% NaCl solution in water).

Inhalation:

Dust may cause slight irritation of the mucous membranes of the nose and throat, cough, jerky breath.

This may result in irritation and bronchopneumonia.

As a result of inhalation of redness of the face, nausea, shortness of breath and cough.

Ingestion:

Swallowing large amounts may cause a burning sensation in the throat with nausea,

Ingestion of large amounts can cause vomiting, diarrhea. In most organs is congestion and dehydration.

Hypertonic solutions may cause severe inflammatory reactions in the gastrointestinal tract.

11.2. Information on other hazards

Endocrine disrupting properties

This substance does not have endocrine disrupting properties.

Other information

No data

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity:

Based on available data, the classification criteria are not met.

Sodium Chloride (CAS no 7647-14-5)

LC₅₀ - fish (*Carassius auratus*) 7341 mg/l (96h)

LC₅₀ - fish (*Lepomis macrochirus*) 9675 mg/l (96h)

LC₅₀ - fish (*Pimephales promelas*) 7650 mg/l (96h)

LC₅₀ - fish (*Salmo gairdneri*) 11000 mg/l (96h)

LC₅₀ - fish (*Gambusia affinis*) 17550 mg/l (96h)

LC₅₀ - fish (*Cyprinus carpio*) 21500 mg/l (1h)

EC₅₀ - invertebrates (*Daphnia magna*) 3412 mg/l (24h)

LC₅₀ - invertebrates (*Snails*) 6200 mg/l (96h)

LC₅₀ - invertebrates (*Caddis flies*) 9000 mg/l (24h)

LC₅₀ - invertebrates (*Lymnea eggs*) 3412 mg/l (96h)

EC₅₀ - Algae (*Nitzschia sp.*) 2430 mg/l (5 days)

12.2. Persistence and degradability

Maximum concentrations of sodium ions released into water and soil - 800 mg / l, chloride - 1000 mg / l sulfate - 500 mg / l, a cyanide content - 0.1 mg, - potassium 80 mg / l Iron - 10 mg / l.

Hydrolysis:

Not applicable. Sodium chloride dissociates in water.

Biodegradation:

Studies of biodegradation in the water, simulation studies on ultimate degradation in surface waters, simulation studies in sediments and soils are not carried out if the substance is inorganic.

12.3. Bioaccumulative potential

Sodium chloride dissociates in water and both ions are components of the bodies of animals.

Octanol / water (Kow): N (sodium chloride is inorganic salt).

Bioconcentration factor (BCF): Not applicable (sodium chloride is inorganic salt).

12.4. Mobility in soil

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In water, sodium chloride is dissociated into ions of sodium and chloride ions. Chloride does not adsorb on particulates. Sodium ions can be adsorbed to soil particles.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties.

12.7. Other adverse effects

No data

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Reutilise if possible or contact a waste processors for recycling or safe disposal.

Uncleaned packaging:

The containers and packing materials contaminated with dangerous substances or preparations, have the same treatment as products.

Recommendation:

Disposal must be made according to official regulations.

Waste code package:

15 01 02 plastic packaging.

SECTION 14: Transport information

14.1. UN number or ID number	Not applicable
14.2. UN proper shipping name	Not applicable
14.3. Transport hazard class(es)	Not applicable
Label no.	Not applicable
14.4. Packing group	Not applicable
14.5. Environmental hazards	No
14.6. Special precautions for user	Not applicable
14.7. Maritime transport in bulk according to IMO instruments	Not applicable

SECTION 15: Regulatory information

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

- Regulation (EC) No 1272/2008 (CLP) 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 (REACH).
- REGULATION (EC) No 1907/2006 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.
- 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

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Chemicals (REACH)

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried out for this substance.

SECTION 16: Other information

Full text of H-phrases mentioned in section 3:

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Classification procedures according to Regulation (EC) 1272/2008

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Changes: section 1-16

Abbreviations and Acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

PP: Severe Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Note to readers

The product described in the safety data sheet should be stored and used in accordance with good industrial practices and in compliance with all applicable legal regulations.

The information contained in the safety data sheet is based on the current state of knowledge and is intended to describe the product in terms of health, safety and environmental regulations. It should not be considered a guarantee of any specific product properties.

We cannot make any representations or warranties regarding the accuracy or completeness of any information provided or the quality or specifications of any products, substances or mixtures discussed herein.

The user is responsible for creating conditions for the safe use of the product and for the consequences of its misuse.

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