



Prepared in accordance with Annex II to Regulation (EC) No 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878 of 18 June 2020.

ES Gel 750 g container desiccants

Date of preparation	27 August 2026
Date of revision	not applicable, first issue
Version	01 (first issue)

SECTION 1: Identification of the mixture and of the company

1.1. Product identifier

Trade name	ES Gel 750 g
Product form	mixture enclosed in sachets forming a strip with a hook
Weight	750 g, a strip of six connected 125 g sachets
Product construction	strip 1140 x 145 x 20 mm (dimension with sheath) with an 80 mm hook; sachets made of Tyvek nonwoven and PE-PP laminate, in a nonwoven protective sheath

The sachets enclose the mixture and are not intended to be opened. The information given in sections 9, 11 and 12 refers to the sorbent filling, that is the material inside the sachets.

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

Identified use	desiccant for container shipping: protection of cargo against moisture and condensation during sea and land transport and during storage
Uses advised against	all uses not listed above. Not to be used as a food or feed additive. Do not open the sachets and do not swallow the contents.

1.3. Details of the supplier of the safety data sheet

Company	ABC-Z System EKO s.c. Bożena Ostrowska-Kochel, Marek, Mateusz Kochel
Address	ul. Przemysłowa 10, 40-020 Katowice, Poland
VAT No	PL9540007045
Telephone	+48 517 132 215
E-mail	abc-z@abc-z.pl
Person responsible for this SDS	Mateusz Kochel, abc-z@abc-z.pl

1.4. Emergency telephone number

Body	Number	Availability
Poison Information Centre (Pracownia Informacji Toksykologicznej i Analiz Laboratoryjnych), Jagiellonian University Medical College, Kraków, Poland	+48 12 411 99 99	24 h / 7 days
Emergency services (Poland)	112 / 999	24 h / 7 days

SECTION 2: Hazards identification

2.1. Classification of the mixture

Classification under Regulation (EC) No 1272/2008 (CLP): Eye Irrit. 2, H319, causes serious eye irritation. The calcium chloride content of the mixture is 50 to below 75 per cent, which exceeds the limit concentration triggering classification of the mixture.



2.2. Label elements

Hazard pictogram	GHS07 (exclamation mark) 
Signal word	Warning
Hazard statements (H)	H319: Causes serious eye irritation.
Precautionary statements (P)	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P264: Wash hands thoroughly after handling. P280: Wear protective gloves, protective clothing and eye 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. P501: Dispose of contents and container in accordance with applicable waste regulations.
Marking on the sachet	factory print in Polish and English: NIE JEŚĆ / DO NOT EAT, NIE OTWIERAĆ / DO NOT OPEN

2.3. Other hazards

PBT / vPvB properties	the mixture does not meet the criteria of Annex XIII to REACH
Endocrine disrupting properties	the mixture does not meet the criteria; none of the components appears on the list drawn up under Article 59(1) of REACH on those grounds
Mechanical hazard	dust may be released if a sachet is torn. Even inert dust may irritate the respiratory tract, see sections 8 and 11
Ingestion hazard	the sachets contain a mixture that must not be eaten; keep out of reach of children

SECTION 3: Composition / information on ingredients

3.1. Substances

Not applicable, the product is a mixture.

3.2. Mixtures

Chemical description: mixture of calcium chloride and modified starch. Modified starch is not classified as hazardous and is not listed in the table.

Name	Identifiers	Conc. [% w/w]	Classification under 1272/2008
Calcium chloride	CAS 10043-52-4 / EC 233-140-8 / Index No 017-013-00-2 / REACH registration No 01-2119494219-28-0048	50 to < 75	Eye Irrit. 2, H319

Full text of the H statements: see section 16.

The REACH registration number refers to calcium chloride as a substance and is held by an actor further up the supply chain. ABC-Z System EKO purchases the product from a supplier established in the European Union and is not an importer within the meaning of REACH.

The sachet envelope (PE-PP laminate, nonwoven) is not a component of the mixture and is therefore not listed in this section.



SECTION 4: First aid measures

4.1. Description of first aid measures

General	In case of doubt or if symptoms persist, seek medical advice and show this safety data sheet.
Inhalation	Move the affected person to fresh air and keep them comfortable for breathing. Seek medical advice if symptoms persist.
Skin contact	Remove contaminated clothing. Wash the skin with plenty of water and pH-neutral soap. Seek medical advice if skin changes occur.
Eye contact	Rinse the eyes with plenty of water for at least 15 minutes, holding the eyelid open. Remove contact lenses if present and easy to do. Seek advice from an ophthalmologist.
Ingestion	Rinse the mouth with water. Give water to drink. Do not induce vomiting. Seek medical attention immediately and show this safety data sheet.

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

The mixture is classified as causing serious eye irritation (Eye Irrit. 2, H319). Contact with dust released from a torn sachet may irritate the eyes and the respiratory tract.

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

Symptomatic treatment. No specific antidote is known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is non-combustible. Use media suitable for the surrounding fire; ABC powder, carbon dioxide or water mist are recommended.
Unsuitable extinguishing media	Do not use a solid water jet, as it may disperse the material.

5.2. Special hazards arising from the mixture

The product is non-combustible and presents no fire hazard under normal conditions. In a surrounding fire, thermal decomposition products of the sachet envelope materials (carbon monoxide and carbon dioxide) may be formed.

5.3. Advice for firefighters

Use self-contained breathing apparatus and full protective clothing. Prevent firefighting water from entering drains, surface water and groundwater.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation and inhalation of dust. For larger quantities, provide ventilation and use a dust mask and protective goggles, see section 8. Keep unprotected persons away from the release area.

6.2. Environmental precautions

The product is not classified as hazardous to the environment. Prevent it from entering drains, surface water and groundwater.

**6.3. Methods and material for containment and cleaning up**

Collect the material mechanically (sweep, shovel or vacuum) and place it in a closable container. Uncontaminated material may be reused. Dispose of the remainder in accordance with section 13.

6.4. Reference to other sections

See sections 8 and 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Follow the principles of good industrial practice and general occupational health and safety rules. Do not open the sachets. Do not eat, drink or smoke while handling the product; wash hands afterwards. Do not empty into drains.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature	5 to 30 °C
Conditions	store in the original, tightly closed collective packaging, in a dry room, away from heat sources, direct sunlight and food
Incompatible materials	strong acids, strong bases and alkalis; water (may react violently)
Note	the product absorbs moisture from the air and loses its performance in an opened collective bag. The shelf life in the original sealed packaging is 24 months.

7.3. Specific end use(s)

Apart from the use given in subsection 1.2, no specific recommendations apply.

SECTION 8: Exposure controls / personal protection**8.1. Control parameters**

Occupational exposure limits (Polish NDS / NDSch / NDSP): **calcium chloride (CAS 10043-52-4) has no limit value of its own** in Annex 1 to the Regulation of the Polish Minister of Family, Labour and Social Policy of 12 June 2018 on the maximum admissible concentrations and intensities of agents harmful to health in the working environment (Journal of Laws 2018, item 1286, as amended; Annex as worded by Journal of Laws 2026, item 447).

Reference values for nuisance dust (European values, excluding national legislation):

Parameter	Value
Nuisance dust, inhalable fraction	10 mg/m ³
Nuisance dust, respirable fraction	4 mg/m ³

DNEL for calcium chloride (CAS 10043-52-4):

Group	Route	Short-term, local	Long-term, local
Workers	inhalation	10 mg/m ³	5 mg/m ³
General population	inhalation	5 mg/m ³	2.5 mg/m ³

For the oral and dermal routes: not relevant. PNEC: not relevant.

Recommended monitoring procedures: EN 689, EN 482 and EN 14042, or equivalent national standards.

8.2. Exposure controls

Respiratory protection	not required with intact sachets. If sachets are torn and dust is released: filtering half mask to EN 149:2001+A1:2009
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Eye protection	not required with intact sachets. In case of contact with the filling (torn sachet, cleaning up spilled filling): tight-fitting safety goggles to EN 166:2002
Hand protection	not required with intact sachets. In case of contact with the filling: protective gloves against minor risks; for prolonged professional exposure, category III gloves to EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018
Skin and body protection	working clothes
Hygiene measures	wash hands after work; do not eat or drink at the workplace
Environmental exposure controls	prevent release into the environment and into drains

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value
Physical state at 20 °C	solid
Appearance	granulate, enclosed in the sachets of the strip
Colour	yellowish
Odour	odourless
Odour threshold	Not relevant due to the nature of the product.
pH	Not relevant due to the nature of the product.
Melting point / freezing point	Not relevant due to the nature of the product.
Boiling point	Not relevant due to the nature of the product.
Flammability	non-combustible
Lower and upper explosive limit	Not relevant due to the nature of the product.
Flash point	Not relevant due to the nature of the product.
Auto-ignition temperature	Not relevant due to the nature of the product.
Decomposition temperature	Not relevant due to the nature of the product.
Kinematic viscosity	Not relevant due to the nature of the product.
Solubility in water	the product is poorly soluble, no numerical value; calcium chloride as a component is readily soluble in water
Partition coefficient n-octanol/water	Not relevant due to the nature of the product.
Vapour pressure	Not relevant due to the nature of the product.
Density at 20 °C	1479.3 kg/m ³
Relative density at 20 °C	1.479
Bulk density	no data available
Relative vapour density	Not relevant due to the nature of the product.
Particle characteristics	granulate. Median equivalent diameter: not relevant due to the nature of the product. The filling is enclosed in sachets and is not placed on the market in loose form.

9.2. Other information

Property	Value
Explosive properties	Not relevant due to the nature of the product.
Oxidising properties	Not relevant due to the nature of the product.
Corrosive to metals	Not relevant due to the nature of the product.
Volatile organic compounds (VOC)	0 % by weight, 0 kg/m ³
Total lead	0 ppm

SECTION 10: Stability and reactivity

10.1 Reactivity	The material is not reactive under normal conditions of storage, handling and use.
10.2 Chemical stability	The material is stable under the conditions described in section 7.
10.3 Possibility of hazardous reactions	No hazardous reactions are expected under the stated conditions.



10.4 Conditions to avoid	Moisture: the product takes up water and thereby loses its function. No conditions giving rise to a hazard are known.
10.5 Incompatible materials	Strong acids, strong bases and alkalis. Water: may react violently.
10.6 Hazardous decomposition products	No hazardous decomposition occurs under normal storage conditions. In a fire, complex mixtures of inorganic substances and decomposition products of the sachet envelope materials may be released.

SECTION 11: Toxicological information

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

Experimental data for the mixture itself are not available. The assessments below follow from data on the components.

Hazard class	Assessment
Acute toxicity (oral, dermal, inhalation)	classification criteria are not met
Skin corrosion / irritation	classification criteria are not met
Serious eye damage / eye irritation	the classification criteria are met: the mixture is classified Eye Irrit. 2, H319, due to a calcium chloride content of 50 to below 75 per cent
Respiratory or skin sensitisation	classification criteria are not met
Germ cell mutagenicity	classification criteria are not met
Carcinogenicity	classification criteria are not met; IARC: not relevant
Reproductive toxicity	classification criteria are not met
STOT, single exposure	classification criteria are not met
STOT, repeated exposure	classification criteria are not met
Aspiration hazard	classification criteria are not met

Toxicological data for the component calcium chloride (CAS 10043-52-4):

Parameter	Value	Species
LD50, oral	2301 mg/kg	rat
LD50, dermal	5100 mg/kg	rabbit

Practical effects: dust released from a torn sachet may irritate the eyes and the respiratory tract. Even inert dust may impair respiratory function at high concentrations.

11.2. Information on other hazards

Endocrine disrupting properties: the mixture does not meet the criteria.

SECTION 12: Ecological information

Experimental data for the mixture itself are not available. The criteria for classification as hazardous to the environment are not met.

12.1. Toxicity

Data for the component calcium chloride (CAS 10043-52-4):

Parameter	Value	Organism	Group
LC50 (96 h)	4630 mg/l	Pimephales promelas	fish
EC50 (48 h)	2400 mg/l	Daphnia magna	crustaceans
EC50 (72 h)	27000 mg/l	Pseudokirchneriella subcapitata	algae
NOEC	230 mg/l	Oncorhynchus mykiss	fish
NOEC	481 mg/l	Daphnia magna	crustaceans
12.2 Persistence and degradability	No data available.		
12.3 Bioaccumulative potential	No data available.		
12.4 Mobility in soil	No data available.		



12.5 Results of PBT and vPvB assessment	The mixture does not meet the PBT or vPvB criteria. No chemical safety assessment has been carried out.
12.6 Endocrine disrupting properties	The mixture does not meet the criteria.
12.7 Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Type of waste	Code	Classification
Unused product and used sachets	16 03 03*	hazardous

Hand the waste over to an authorised waste operator. Do not dispose of it into drains. Collective packaging that has been in direct contact with the product is to be treated in the same way as the product; other packaging as non-hazardous waste.

The waste codes are given in accordance with the Polish waste catalogue. A waste operator in another Member State determines the classification under local legislation.

SECTION 14: Transport information

The product is not a dangerous good within the meaning of transport legislation.

Subsection	ADR / RID / ADN	IMDG	ICAO-IATA
14.1 UN number or ID number	not relevant	not relevant	not relevant
14.2 UN proper shipping name	not relevant	not relevant	not relevant
14.3 Transport hazard class(es)	not relevant	not relevant	not relevant
14.4 Packing group	not relevant	not relevant	not relevant
14.5 Environmental hazards	no	not a marine pollutant	no

14.6 Special precautions for user: not relevant.

14.7 Maritime transport in bulk according to IMO instruments: not relevant.

Versions against which the assessment was made: ADR 2023, RID 2023, IMDG 41-22, IATA/ICAO 2024.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific to the mixture

Provision	Status
Annex XIV to REACH: list of substances subject to authorisation	none of the components appears on the list
Candidate list of substances of very high concern (SVHC), Article 59 of REACH	none of the components appears on the list. The candidate list is updated by ECHA twice a year
Annex XVII to REACH: restrictions	no applicable restrictions
Regulation (EU) 2024/590: substances that deplete the ozone layer	not relevant
Regulation (EU) No 649/2012 (PIC)	not relevant
Regulation (EU) 2019/1021 (POP)	not relevant
Directive 2012/18/EU (Seveso III)	not relevant
Regulation (EU) No 528/2012 (biocidal products), Article 95	not relevant

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture.

SECTION 16: Other information

16.1. Full text of the hazard statements referred to in section 3

H319: Causes serious eye irritation.

The statement refers both to the component named and to the mixture.



Classification procedure for the mixture: Eye Irrit. 2, H319, calculation method based on data on the components.

16.2. Issue of this safety data sheet

Scope of change	Description
Issue	first issue of the safety data sheet for ES Gel 750 g
Basis	safety data sheet of the supplier of the mixture

16.3. Abbreviations and acronyms

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

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

IMDG: International Maritime Dangerous Goods Code.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging.

DNEL: Derived No-Effect Level.

PNEC: Predicted No-Effect Concentration.

LD50: lethal dose for 50 % of the population.

LC50: lethal concentration for 50 % of the population.

EC50: effective concentration for 50 % of the population.

NOEC: No Observed Effect Concentration.

PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative.

STOT: specific target organ toxicity.

SVHC: substance of very high concern.

NDS: Polish national occupational exposure limit.

IARC: International Agency for Research on Cancer.

NDSch: Polish short-term exposure limit.

NDSP: Polish ceiling limit value.

16.4. Sources

Safety data sheet of the supplier of the mixture. Polish regulation on occupational exposure limits (Journal of Laws 2018, item 1286, as amended). European Chemicals Agency database (echa.europa.eu). EUR-Lex portal (eur-lex.europa.eu).

16.5. Disclaimer

The information above corresponds to our best knowledge at the time this safety data sheet was drawn up. It was prepared on the basis of data from the supplier of the mixture. The information is not exhaustive and serves as a reference for the safe handling of the product in storage, use, transport and disposal. The conditions and manner of use of the product are beyond our control and responsibility. This sheet does not constitute a warranty of the properties of the product.

Training of personnel handling the product is recommended.

This document is a translation of the Polish original. In case of any discrepancy, the Polish version prevails.