SAFETY DATA SHEET

According to Regulation (EU) No 2020/878

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

1.1. Product identifier

Product name	:	LIMPRO MOISTURE ABSORBER
Product code	:	LP4V007
Chemical name	:	Calcium chloride
Registration nr.	:	01-2119494219-28
Annex VI no	:	017-013-00-2

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

Application	:	SU21 Consumer product. PC2 Adsorbent.

1.3. Details of the supplier of the safety data sheet

Supplier	:	Dovox B.V. Computerweg 3 3542 DP UTRECHT, The Netherlands
Telephone	:	+31-30-7116 824
E-mail	:	info@dovox.nl
Website	:	www.dovox.nl

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone	:	+31-30-7116 824	(During office hours only)

SECTION 2 HAZARDS IDENTIFICATION *

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC)	:	Eye irritation, category 2.
Human health hazards	:	Causes serious eye irritation.
Physical/chemical hazards	:	Not classified as dangerous according to statutory EC-Directives. Hygroscopic.
Environmental hazards	:	Not classified as dangerous according to statutory EC-Directives.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :

Signal word : Warning

H- and P-phrases	:	H319	Causes serious eye irritation.
		P101	If medical advice is needed, have product container or label at hand.
		P102	Keep out of reach of children.
		P280 eyes only	Wear 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.
		P337+P313	If eye irritation persists: Get medical advice/attention.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:
Hazard pictograms :

Signal word : Warning

H- and P-phrases : P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Additional labelling (for all packaging sizes)
: Calcium chloride
: EC number: 233-140-8

2.3. Other hazards

Other information : Not classified as PBT or vPvB.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

3.1. Substances

Product description : Substance. Not classified as PBT or vPvB. Not included in the EU list with SVHC substances.

Information on substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
Calcium chloride	96	10043-52-4	233-140-8		01-2119494219-28
Potassium chloride	1 - < 5	7447-40-7	231-211-8	MAC	
Calcium bromide	1 - < 3	7789-41-5	232-164-6		
Sodium chloride	1 - < 5	7647-14-5	231-598-3	MAC	

Occupational exposure limit(s), if relevant, are listed in section 8.

Substance name	Hazard Class	H-phrases	Pictograms	
Calcium chloride	Eye Irrit. 2	H319	GHS07	
Potassium chloride	-----	-----	-----	
Calcium bromide	Eye Dam. 1	H318	GHS05	
Sodium chloride	-----	-----	-----	

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures
Inhalation : Not applicable.
Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up.
Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor.
Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

Inhalation	:	No specific effects and/or symptoms are known.
Skin contact	:	No specific effects and/or symptoms are known.
Eye contact	:	Irritant. May cause redness and pain.
Ingestion	:	May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians	:	
General	:	Call a poison control centre for guidance.

SECTION 5 FIRE-FIGHTING MEASURES *

5.1. Extinguishing media

Extinguishing media

Suitable	:	Carbondioxide (CO_2). Foam. Dry chemical. Water fog.
Not suitable	:	Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	None known. Non flammable product.
Hazardous thermal decomposition products	:	None known.

5.3. Advice for firefighters

Special protective equipment for fire-fighters	:	Not applicable.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions	:	Avoid release of product into sewers, surface water and/or ground water.
Other information	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections	:	See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling	:	Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage	:	Keep in a cool, dry and well-ventilated place (< 35 °C).
Recommended packaging	:	Keep only in the original container.
Non recommended packaging	:	None known.

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments	Source
Calcium chloride		5	10		MAC: CS
Potassium chloride		5	-		MAC: LT
Sodium chloride		10	-	-	Dow chemical, Industrial Hygiene Guidelines

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Calcium chloride	Inhalation	10 mg/m3		5 mg/m3	
Potassium chloride	Inhalation		5320 mg/m3		1064 mg/m3
	Dermal		910 mg/kg bw		303 mg/kg bw/day
Calcium bromide	Inhalation	500 mg/m3			1,4 mg/m3
	Dermal		0,2 mg/kg bw		
Sodium chloride	Dermal		295,52 mg/kg bw		295,52 mg/kg bw/day
	Inhalation		2068,62 mg/m3		2068,62 mg/m3

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Calcium chloride	Inhalation	5 mg/m3		2,5 mg/m3	
Potassium chloride	Inhalation		1365 mg/m3		273 mg/m3
	Dermal		910 mg/kg bw		182 mg/kg bw/day
	Oral		455 mg/kg bw		91 mg/kg bw/day
Calcium bromide	Inhalation				0,25 mg/m3
	Dermal				0,073 mg/kg bw/day
	Oral				0,073 mg/kg bw/day
Sodium chloride	Dermal		126,65 mg/kg bw		126,65 mg/kg bw/day
	Inhalation		443,28 mg/m3		443,28 mg/m3
	Oral		126,65 mg/kg bw		126,65 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Potassium chloride	Water	0,1 mg/l	0,1 mg/l	
	Intermittent water			1 mg/l
	STP			10 mg/l
Calcium bromide	Water	0,117 mg/l	0,058 mg/l	

	Sediment	0,433 mg/kg	0,215 mg/kg	
	Intermittent water			0,208 mg/l
	STP			77,7 mg/l
	Soil			0,2 mg/kg
Sodium chloride	Water	5 mg/l		
	Intermittent water			19 mg/l
	STP			500 mg/l
	Soil			4,86 mg/kg

8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:
The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection : Use of specific protective industrial clothing is not required under normal conditions of use.
Respiratory protection : Take care of sufficient ventilation.
Hand protection : Under normal conditions of use specific gloves are not required.
Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES *

9.1. Information on basic physical and chemical properties

Physical state	: Solid.	
Colour	: White.	
Odour	: Odourless.	
Odour threshold	: Not applicable.	Odourless.
pH	: 9	10% solution.
Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: Not applicable.	
Flash point	: Not relevant.	Solid.
Flammability (solid, gas)	: Not flammable.	Not easily ignitable.
Auto ignition temperature	: Not applicable.	Not combustible.
Boiling point/boiling range	: 1935 °C	
Melting point/melting range	: 782 °C	
Explosive properties	: Not an explosive.	Does not contain explosives.
Explosion limits (% in air)	: Not applicable.	
Oxidising properties	: Not oxidizing.	
Decomposition temperature	: Not known.	
Viscosity (20°C)	: Not applicable.	Solid.
Vapour pressure (20°C)	: Very low.	Solid.
Relative vapour density	: Not applicable.	The solvent content of this product is less than 1%. Solid.
Relative density (20°C)	: 2,15 g/ml	
Particle characteristics	: Not relevant.	Too big, bulky to be considered particle(s).

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : Hygroscopic. Reacts with water. No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : No specific recommendations.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION *

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

Inhalation
- Acute toxicity : Not applicable.
- Corrosion/irritation : Not classified due to lack of data.
- Sensitisation : Not classified due to lack of data.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact
- Acute toxicity : ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : No specific effects and/or symptoms are known. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Eye contact
- Corrosion/irritation : Irritant.

Ingestion
- Acute toxicity : ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Not expected to be an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Reprotoxicity : Development: Not classified - Based on available data, the classification criteria are not met.
Fertility: Not classified due to lack of data.

Toxicological information:

Chemical name	Property		Method	Test animal
Calcium chloride	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rabbit
	LD50 (oral)	2301 mg/kg bw	OECD 401	Rat
	Genotoxicity - in vitro	Not genotoxic	OECD 473	-----
	Eye irritation	Highly irritant	OECD 405	Rabbit
	Skin irritation	Non-irritant	OECD 404	Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (development, oral)	> 176 mg/kg bw/d	OECD 414	Rat
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	LC50 (inhalation) - estimate	> 5000 mg/m3	-----	
	Skin sensitisation - estimate	Not sensitizing	Read across	Human
Calcium bromide	LD50 (oral)	> 2000 mg/kg bw		Rat
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	NOAEL (oral) - estimate	16,5 mg/kg bw/d	Read across	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - estimate	Not genotoxic	Read across	
	Skin irritation	Non-irritant		Rabbit
	Eye irritation	Irritant	OECD 405	Rabbit
	NOAEL (development) - estimate	250 mg/kg.d	Read across	
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig

11.2. Information on other hazards

Endocrine disrupting properties : Not applicable.
Other information : Not applicable.

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

Ecotoxicity : Calculated LC50 (fish): 3786 mg/l. Calculated EC50 (waterflea): 1801 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence – degradability : No specific information known.

12.3. Bioaccumulative potential

Bioaccumulative potential : No BCF available. No bioaccumulation is expected.

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Not classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties : Not applicable.

12.7. Other adverse effects

Other adverse effects : Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.

Additional warning : None.

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number or ID number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Maritime transport in bulk according to IMO instruments

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION *

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

Community regulations : Regulation (EU) No 2020/878 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations. Directive 2008/98/EC (waste).

15.2. Chemical safety assessment

Chemical safety assessment : Not available.

SECTION 16 OTHER INFORMATION *

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2020/878 dated 18 June 2020 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	:	Acute Toxicity Estimate
CLP	:	Classification, Labeling & Packaging
CMR	:	Carcinogenic, Mutagenic or toxic for Reproduction
EEC	:	European Economic Community
GHS	:	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	:	International Air Transport Association
IBC code	:	International Bulk Chemical Code
IMDG	:	International Maritime Dangerous Goods Code
LD50/LC50	:	Lethal Dose/Concentration for 50% of a population
MAC	:	Maximum Allowable Concentration
MARPOL	:	International Convention for the Prevention of Pollution From Ships
NO(A)EL	:	No Observed (Adverse) Effect Level
OECD	:	Organisation for Economic Co-operation and Development
PBT	:	Persistent, Bioaccumulative and Toxic
PC	:	Chemical product category
PT	:	Product type
REACH	:	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	:	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	:	Sewage Treatment Plant
SU	:	Sector of Use
TWA/STEL	:	Time-Weighted Average/Short Term Exposure Limit
UN	:	United Nations
UFI	:	Unique formula identifier
VOC	:	Volatile Organic Compounds
vPvB	:	Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Eye Irrit. 2	:	Expert judgement.

Full text of hazard classes mentioned in section 3:

Eye Dam. 1	:	Serious eye damage, category 1.
Eye Irrit. 2	:	Eye irritation, category 2.

Full text of H-phrases mentioned in section 3:

H318	Causes serious eye damage.

H319	Causes serious eye irritation.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

End of safety data sheet.