SAFETY DATA SHEET

Conforms to Regulation EC 1907/2006 (REACH) as amended by Regulation (EU) 2015/830

ZER266 – Zero In Compact Dehumidifier

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Zero In Compact Dehumidifier

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

Dehumidifier

1.3. Details of the supplier of the safety data sheet

STV International Ltd
Forge House
Little Cressingham
Watton
Thetford
Norfolk
IP25 6ND

+ 44 (0) 1953 881 580 (Office hours only)
info@stvpestcontrol.com

1.4. Emergency telephone number

For product information, contact STV International Ltd on the telephone number stated in section 1.3.

In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

For urgent medical advice, call the NHS Helpline on 111 (England, Scotland & Wales).
For medical emergencies, dial 999 (UK & Ireland) or 112 from any EU country.

Environmental agency emergency phone number 0800 807060.

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Acute Tox. 4; H302
Eye Irrit. 2; H319

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 (CLP)
Hazard pictogram :



Signal word: Warning
Hazard statements :
H302 Harmful if swallowed
H319 Causes serious eye irriation
Precautionary statements
General:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
Prevention:
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear eye protection/face protection
Response:
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
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.
Disposal:
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3. Other hazards
A PBT and vPvB assessment shall not be conducted for inorganic substances. Contact with dry skin may cause irritation. Prolonged exposure to moistened material or concentrated solutions resulted in marked skin irritation or possible burns.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance name	CAS No.	EC No.	Index No.	Concentration (%)	Classification-Regulation (EC) No 1272/2008
Calcium chloride	10043-52-4	233-140-8	017-013-00-2	94	Acute Tox. 4; H302 Eye Irrit. 2; H319
Sodium chloride	7647-14-5	231-598-3	-	5	Not classified.

Calcium hydroxide	1305-62-0	215-137-3	-	0.6	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335
Magnesium chloride	7786-30-3	232-094-6	-	0.4	Not classified.

For the full text of H-Statements, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes (remove contact lenses if easily possible), occasionally lifting the upper and lower eyelids. If eye irritation persists, seek medical attention.

Skin contact

Remove contaminated clothing. Wash thoroughly with water and mild soap. If irritation persists, seek medical attention. Wash contaminated clothing before reuse.

Inhalation

Not likely to occur for granules. If dust is inhaled, remove to fresh air and keep comfortable for breathing. If irritation persists or breathing discomfort occurs, seek medical attention. Give oxygen if breathing is difficult.

Ingestion

Do not induce vomiting without medical advice. Rinse mouth and drink 2-4 cups of milk or water. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

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

Acute: Causes serious eye irritation. May cause skin irritation. Ingestion may cause gastrointestinal irritation. Dust may cause eye, skin and respiratory irritation.

Delayed: Prolonged exposure to moistened material or concentrated solutions resulting in marked skin irritation or possible burns.

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

Note to physicians: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray, dry chemical, foam, CO_2, or sand. Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media: Not applicable.

5.2. Special hazards arising from the substance or mixture

This product is non-flammable and does not pose fire or explosion hazards. Exothermic reaction with water. Reaction with zinc releases flammable/explosive hydrogen gas. Thermal decomposition may produce toxic fumes. Gives off irritating or toxic fumes (or gases) in a fire.

5.3. Advice for firefighters

Firefighters should wear full protective clothing and positive pressure self-contained breathing apparatus (SCBA). Approach fire from upwind side. Fight fire from a distance of protected area. Cool fire exposed containers with water spray. If safe to do so, remove containers from path of fire.

SECTION 6: Accidental release measures

6.1. Personal precaution, protective equipment and emergency procedures

Keep unnecessary people away. Isolate leakage areas and restrict access. Ensure adequate ventilation. Use suitable protective equipment. Avoid contact with skin and eyes. Avoid breathing dust.

6.2. Environmental precautions

Prevent entry into sewers, drains or waterways. If contamination occurs, advise local emergency services.

6.3. Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Do not touch or walk through spilled material. CAUTION: Spilled material may be slippery. Sweep up or vacuum up spillage and collect in a suitable container for disposal. Avoid dust formation. Then clean up spill with water.

6.4. Reference to other sections

See sections 7, 8 and 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Ensure good ventilation/exhaustion at the workplace. Minimise dust generation and accumulation.
- Keep container tightly closed. Avoid exposure to moist air or water. Keep away from incompatibles.
- Use personal protective equipment. Avoid eye and skin contact. Avoid inhalation. Do not ingest.
- Handle in accordance with good industrial hygiene and safety practices. Maintain good housekeeping practices.
- Do not eat, drink or smoke in working areas. Wash skin thoroughly before breaks and after handling.
- Remove contaminated clothing and wash in before reuse.
- If you feel unwell, seek medical attention and show the label when possible.

7.2. Conditions for safe storage, including any incompatibilities

- Store in a cool and dry place. Keep only in the original container that is clearly labelled.
- Hygroscopic. Keep containers tightly closed when not in use. Keep upright.
- Protect from moisture and sunlight. Keep away from water. Keep away from heat.
- Protect containers against physical damage and check regularly for leaks.
- Keep away from food, beverages and feeds. Store away from zinc and other incompatible materials.
- Keep out of reach of children.

7.3. Specific end use(s)

This product is intended for use in a domestic environment. It is widely used in wardrobes, bookcases, closets, drawers, etc. It can be used to remove humidity and odour, prevent mildew and freshen air.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

Exposure limits may differ from country to country. Refer to specific country regulations for additional exposure limit information.

Calcium hydroxide

UK: TWA 5 mg/m^3

Germany MAK : TWA 1 mg/m^3 (inhalable fraction)

Sweden : LLV 3 mg/m^3 (inhalable dust); 6 mg/m^3 (inhalable dust)

ACGIH TLV : TWA 5 mg/m^3

OSHA PEL : TWA 15 mg/m^3 (total dust); 6 mg/m^3 (respirable fraction)

Nuisance dusts or particulates not otherwise regulated (PNOR)

UK : TWA 10mg/m^3 (inhalable dust); TWA 5 mg/m^3 (respirable dust)

OSHA PEL : TWA 15mg/m^3 (total dust); TWA 5 mg/m^3 (respirable fraction)

Biological limit values

No data available.

8.2. Exposure controls

Appropriate engineering controls

Use local exhaust ventilation or other engineering controls to keep airborne concentrations below applicable exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment

(a) Eye/face protection

Wear safety glasses or goggles if dusty conditions exist. None required for normal use.

(b) Skin protection

Wear chemical- resistant gloves and protective clothing. None required for normal use.

(c) Respiratory protection

Use a European Standard EN 149 approved respirator (dust mask) when ventilation is inadequate or exposure limits are exceeded. None required for normal use.

(d) Thermal hazards

Not applicable.

Environmental exposure controls

Do not allow material to be released to the environment without the proper governmental permits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Appearance: White or off-white solid granules
(b) Odour: Odourless
(c) Odour threshold: Not applicable
(d) pH: 8-10 (5% aqueous solution)
(e) Melting point/freezing point: Approx 777^{o}C
(f) Initial boiling point and boiling range: >1600^{o}C
(g) Flash point: Not applicable
(h) Evaporation rate: Not applicable
(i) Flammability (solid, gas): Non-flammable solid
(j) Upper/lower flammability or explosive limits: Not applicable
(k) Vapour pressure: Negligible
(l) Vapour density: Not applicable
(m) Relative density: 2.2
(n) Solubility(ies): Very soluble in water
(o) Partition coefficient: n-octanol/water: Not applicable
(p) Auto-ignition temperature: Not applicable
(q) Decomposition temperature: Not applicable
(r) Viscosity: Not applicable
(s) Explosive properties: No explosive properties
(t) Oxidising properties: No oxidising properties

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Exothermic reaction with water. Reactive with strong acids and zinc.

10.2. Chemical stability

Hygroscopic. Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Decomposes on heating producing toxic and corrosive fumes of chlorine. Reacts violently (violent boiling) with water, generating heat. Reaction with zinc releases flammable/explosive hydrogen gas. Violent polymerisation occurs when mixed with methyl vinyl ether. The solutions is mildly corrosive to many metals including stainless steel. No hazardous reaction known under conditions of normal use.

10.4. Conditions to avoid

Dust generation, excess heat, exposure to moist air or water, and incompatibles.

10.5. Incompatible materials

Strong acids, zinc, boric oxide, methyl, vinyl, ether, bromine trifluoride.

10.6. Hazardous decomposition products

Chlorine, calcium oxide. Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

(a) Acute toxicity

Harmful if swallowed. Inhalation is not expected to occur or present a hazard under normal conditions of use.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium chloride	1000 mg/kg (rat) 1940 mg/kg (mouse)	2630 mg/kg (rat) >5000 mg/kg (rabbit)	>160 mg/m3/4h (rat)
Sodium chloride	3000 mg/kg (rat)	>10000 mg/kg (rabbit)	No data
Calcium hydroxide	500-2000 mg/kg (rat) 7340 mg/kg (rat)	No data	>42 g/m3/1h (rat)
Magnesium chloride	2800 mg/kg (rat)	>2000 mg/kg (rat)	No data

(b) Skin corrosion/irritation

Non-corrosive for skin. Contact with dry skin may cause irritation; repeated or prolonged contact may cause dermatitis. Prolonged exposure to moistened material or concentrated solutions resulted in marked skin irritation or possible burns.

Calcium chloride :	OECD Test Guideline 404, rabbit, skin 4h US Federal Register 38: 187, Part 1500, Section 41, 1973; rabbit, skin, 24h	Not/slightly irritating Moderately irritating
Sodium chloride :	Draize test, rabbit, skin: 500 mg/24H	Mild
Calcium hydroxide :	OECD Test Guideline 404, rabbit, skin	Irritating to skin

(c) Serious eye damage/irritation

Direct contact causes serious eye irritation.

Calcium chloride :	OECD Test Guideline 405, rabbit, eye, 100mg	Highly irritating
Sodium chloride :	Draize test, rabbit, eye: 100mg Draize test, rabbit, eye: 100mg/24H Draize test, rabbit, eye: 10mg	Mild Moderate Moderate
Calcium hydroxide :	Draize test, rabbit, eye: 10mg OECD Test Guideline 405, rabbit, eye	Severe Severe eye irritation
Magnesium chloride :	OECD Test Guideline 405, rabbit, eye, 72H	No eye irritation

(d) Respiratory or skin sensitisation

This product is not sensitizing.

(e) Germ cell mutagenicity

Contains no component listed as a mutagen.

Genetic toxicity of calcium chloride was negative in the bacterial mutation tests and mammalian chromosome aberration test.

(f) Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogens by IARC.

(g) Reproductive toxicity

Not toxic for reproduction.

(h) STOT- single exposure

This product is not classified as a specific target organ toxicant, single exposure.

(i) STOT- repeated exposure

No data available – no classification proposed.

(j) Aspiration hazard

Not expected to be an aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

This product is not classified as hazardous to the environment.

Component	Aquatic toxicity
Calcium chloride	96h LC50 (Fish: Fathead minnow): 4630 mg/L 48h EC50 (Crustacea: Daphnia Magna): 1062 mg/L
Sodium chloride	96h LC50 (Fish: Bluegill): 5840 mg/L 48h LC50 (Crudtacea: Daphnia Magna): 1661 mg/L
Calcium hydroxide	96h LC50 (Fish: Mosquitofish): 160 mg/L 48h EC50 (Crustacea: Daphnia Magna): 49.1 mg/L
Magnesium chloride	96h LC50 (Fish: Fathead minnow): 2119.3 mg/L 48h LC50 (Crustacea: Daphnia Magna): 584.4 mg/L

12.2. Persistence and degradability

The methods for determining degradability are not applicable for inorganic substances. Calcium chloride is easily dissociated into calcium and chloride ions in water.

12.3. Bioaccumulative potential

Does not bioaccumulate.

12.4. Mobility in soil

If released into soil, this product will absorb the water/moisture from the soil/air; it is soluble in water and may leach through soil into ground water. Will not volatilize.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of regulation (EC) 1907/2006, a PBT and vPvB assessment shall not be conducted for inorganic substances.

12.6. Other adverse effects

Slightly hazardous for water. The solution in water is a weak base. Prevent the contamination of surface water or groundwater.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Non-hazardous waste. Dispose of waste and residues in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Do not dispose directly into rivers, watercourses or drains. Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

ADR/RID: Not regulated
IMDG: Not regulated
ICAO/IATA: Not regulated

14.4. Packing group

Not applicable

14.5. Environmental hazards

Marine pollutant/Environmentally hazardous: No

14.6. Special precautions for user:

No special precautions

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

- **Regulation (EC) No 1907/2006 (REACH)**

Annex XIV – List of substances subject to authorisation

No components in this product are listed.

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

No components in this product are listed.

- **Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals, Annex I**

No components in this product are listed.

- **Commission Regulation (EC) No 465/2008 about certain substances that may be PBT and are listed in EINECS**

No components in this product are listed.

- **Regulation (EC) No 1005/2009 on substances that deplete the ozone layer, Annex I and II**

No components in this product are listed.

- **Regulation (EU) No 850/2004 on persistent organic pollutants**

No components in this product are listed.

- **EINECS inventory status**

All components are listed on the EINECS inventory.

- **Water hazard class (Germany)**

WGK 1 (self classification): Low hazard to waters.

15.2. Chemical safety assessment

The Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

(a) Abbreviations and acronyms

CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No 1272/2008]
PBT	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and Very Bioaccumulative
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety and Health Administration
OECD	Organisation for Economic Co-operation and Development
IARC	International Agency for Research on Cancer
ADR	European Agreement concerning the International Carriage on Dangerous Goods by Road
RID	Regulations concerning the International Transport of Dangerous Goods by Rail
IMDG	International Maritime Code for Dangerous Goods
ICAO	International Civil Aviation Organisation
IATA	International Air Transport Assosciation
MARPOL	International convention for the prevention of pollution from ships, 1973 as modified by the 73/78 protocol of 1978
IBC Code	International code for the construction and equipment of ships carrying dangerous chemicals in bulk
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
EINECS	European Inventory of Existing Commercial Chemical Substances
RTECS	Registry of Toxic Effects of Chemical Substances

(c) Key literature references and sources for data

[1] Screening Information Data Set for Calcium chloride (CAS No. 10043-52-4)
[2] International Chemical Safety Cards (ICSC) 1184 – Calcium chloride (anhydrous)
[3] HSDB (Hazardous Substances Data Bank): Sodium chloride
[4] RTECS No.: EV9800000; VZ4725000; EW2800000; OM2800000

(d) Full text of H-statements

H302 Harmful if swallowed.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Comments

Use only in accordance with label instructions.

The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation. The information in this data sheet should be considered when undertaking a risk assessment under the COSHH regulations. The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the storage and transportation of the preparation. The information in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by STV International Ltd for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.