Otto Chemie Pet Ltd An ISO 9001 : 2015 & GMP Certified Company

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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Calcium hypochlorite, pract Product Code : C 1422 CAS No: 7778-54-3

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet Company identification OTTO CHEMIE PVT LTD No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number Phone no. : + 91 98200 41841 (10 : 00 am - 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Oxidizing solids, (Category 2)Acute toxicity, (Category 4)Skin corrosion, (Sub-category

1B) Serious eye damage, (Category 1) Short-term (acute) aquatic hazard, (Category 1) 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H272 H302 H314 H400 Precautionary Statements P210 P260

P273 P280

P303 + P361 + P353

P305 + P351 + P338

Supplemental Hazard information (EU) EUH031 Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements H314 Precautionary Statements P260 H272: May intensify fire; oxidizer. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H400: Very toxic to aquatic life.

Danger

May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe dusts or mists. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact with acids liberates toxic gas. Danger

Causes severe skin burns and eye damage.

Do not breathe dusts or mists.

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P280

Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. P305 + P351 + P338 Remove contact lenses, if present and easy to do. Continue rinsina. Supplemental Hazard information (EU) EUH031 Contact with acids liberates toxic gas.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula :	Ca(OCI)2
Molecular weight	: 142,99 g/m
CAS-No.	: 7778-54-3
EC-No.	: 231-908-7

Component	Classification	Concentration
calcium hypochlorite		
CAS-No 7778-54-3 EC-No. 231-908-7	Ox. Sol. 2; Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 1; H272, H302, H314, H318, H400 Concentration limits: >= 5 %: Skin Corr. 1B, H314; 1 - < 5 %: Skin Irrit. 2, H315; 3 - < 5 %: Eye Dam. 1, H318; 0,5 - < 3 %: Eye Irrit. 2, H319; M-Factor - Aquatic Acute: 10	<= 100 %

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of

perforation). Call a physician immediately. Do not attempt to neutralise.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media Sand Cement 5.2 Special hazards arising from the substance or mixture Hydrogen chloride gas Calcium oxide Not combustible. Fire may cause evolution of: Hvdrogen chloride gas Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. 6.2 Environmental precautions Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections For disposal see section 13. **SECTION 7: Handling and storage** 7.1 Precautions for safe handling Advice on safe handling Keep workplace dry. Do not allow product to come into contact with water. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Protected from light. Tightly closed. Separately or together with other oxidising substances only and away from sources of ignition and heat.Because of their oxidation potential these products can raise the burning rate of combustible substances substantially or ignite

combustible substances on contact with them.

Do not store near acids.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 5.1A: Strongly oxidizing hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Body Protection protective clothing Respiratory protection Recommended Filter type: Filter B-(P2) The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state granules b) Color white, to, gray c) Odor chlorine-like d) Melting Melting point/ range: 100 °C 1

point/freezing point	
e) Initial boiling point	No data available
and boiling range	
f) Flammability (solid,	No data available
gas)	
g) Upper/lower	No data available
flammability or	
explosive limits	
h) Flash point	No data available
i) Autoignition	No data available
temperature	
j) Decomposition	No data available
temperature	
k) pH	No data available
I) Viscosity	Viscosity, kinematic: No data available

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m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties category 2. 9.2 Other safety information No data available Viscosity, dynamic: No data available No data available Not applicable for inorganic substances

No data available 2,350 g/cm3 No data available No data available

No data available

No data available

The substance or mixture is classified as oxidizing with the

SECTION 10: Stability and reactivity

10.1 Reactivitv Contact with acids liberates toxic gas. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) 10.3 Possibility of hazardous reactions Generates dangerous gases or fumes in contact with: Acids 10.4 Conditions to avoid no information available 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products In the event of fire: see section 5 **SECTION 11: Toxicological information** 11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information 12.1 Toxicity

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill sunfish) - 0,049 - 0,16 mg/l -96 h Remarks: (IUCLID) Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0,067 mg/l - 48 h Remarks: (ECOTOX Database) Toxicity to algae IC50 - algae - 2 mg/l - 72 h Remarks: (Lit.) 12.2 Persistence and degradability The methods for determining the biological degradability are not applicable to inorganic substances. 12.3 Bioaccumulative potential No data available

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12.4 Modility in soli		
No data available		
12.5 Results of PBT and vPvB assessment		
This substance/mixture contains no components of		
bioaccumulative and toxic (PBT), or very persister	nt and very bioaccumulative (v	PvB) at
levels of 0.1% or higher.		
12.6 Endocrine disrupting properties		
Product:		
Assessment :		ture does not contain components
		e endocrine disrupting properties according to
	REACH Article 57(
	Delegated regulation	on (EU) 2017/2100 or Commission
40.7 Other advances offered	Regulation (EU) 20	018/605 at levels of 0.1% or higher.
12.7 Other adverse effects		
Harmful effect due to pH shift.		
Forms corrosive mixtures with water even if dilute	d.	
Discharge into the environment must be avoided.		
OFOTION 40. Diseased as a side of the		
SECTION 13: Disposal considerations		X N AL
13.1 Waste treatment methods		
No data available		
SECTION 44: Transport information		
SECTION 14: Transport information 14.1 UN number		
ADR/RID: 1748	IMDG: 1748	IATA: 1748
14.2 UN proper shipping name	IIVIDG. 1748	IATA. 1740
ADR/RID: CALCIUM HYPOC		
IMDG: CALCIUM HYPOC		
IATA: Calcium hypochlori		
14.3 Transport hazard class(es)	ic, dry	
ADR/RID: 5.1	IMDG: 5.1	IATA: 5.1
14.4 Packaging group		
ADR/RID: II	IMDG: II	IATA: II
14.5 Environmental hazards		
ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no
14.6 Special precautions for user		
Tunnel restriction code : (E)		
Further information : No data available		
SECTION 15: Regulatory information		
15.1 Safety, health and environmental regulations	legislation specific for the	
substance or mixture		
This material safety data sheet complies with the	requirements of Regulation (E0	C) No.
1907/2006.		
National legislation		
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council		
•		
on the control of major-accident hazards involving dangerous substances.		
P8 OXIDISING LIQUIDS AND		
SOLIDS		
E1 ENVIRONMENTAL HAZARDS		
Other regulations		
Observe work restrictions regarding maternity pro	tection in accordance to Dir 92	2/85/EEC or
stricter national regulations where applicable.		
Take note of Dir 94/33/EC on the protection of you	ing people at work.	
15.2 Chemical Safety Assessment	.	
For this product a chemical safety assessment wa	is not carried out	

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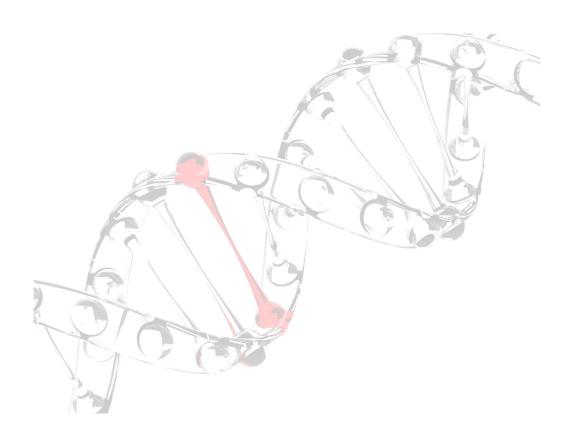
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SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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