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PRODUCT SAFETY DATA SHEET

1 IDENTIFICATION OF PREPARATION AND THE SUPPLIER

Trade Name: JANGRO CHLORINE TABLETS
Supplier: Jangro Limited, as above

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	EINECS No.	CAS No.	% Range	Symbol	Risk Phrase
Sodium Dichloroisocyanurate	220-767-7	2893-78-9	50	O, Nn, N	R8-22-31-36/37-50/53
Adipic Acid	204-673-3	124-04-9	15-30	Xi	R36
Sodium Carbonate	207-838-8	497-19-8	0-5	Xi	R36

COMPOSITION COMMENTS: An effervescent base with an active ingredient of sodium ichloroisocyanurate, Na DCC.

3 HAZARDS IDENTIFICATION

Oxidising, Harmful if Swallowed.
Irritating to eyes and respiratory system.
Contact with acids liberates toxic gas (Chlorine)

4 FIRST AID MEASURES

Eyes: Keeping eye open, immediately irrigate thoroughly with water or eyewash for at least 15 minutes obtain medical attention.
Skin: Wash thoroughly with plenty water.
Ingestion: Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give water to drink. Obtain medical attention immediately if several tablets may have been swallowed..
Inhalation: Remove to fresh air if affected.

NB. These tablets are not a medicine and are not intended for oral administration.

5 FIRE FIGHTING MEASURES

Extinguishing Media: On small fires, use water-spray or fog. On large fires, use heavy deluge or fog steams. If insufficient water is used there is risk of explosion of hot damp material. DO NOT use dry chemical extinguisher containing ammonium compounds. Product is potentially flammable. Decomposes above 250°C with release of toxic fumes (chlorine) so breathing apparatus should be worn.

6 ACCIDENTAL RELEASE MEASURES

Small + Large Spillages: Do not add water, sweep up into small ($\leq 500g$), clean, dry containers. For large quantities ($>100kg$) place into bins lined with polythene bags.
Do not allow to contaminate water courses. Do not contaminate spill materials with any organic materials, ammonia, ammonia salts or urea. Respiratory protection may be necessary.

7 HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact of dust or aqueous solution with skin, eyes and clothing. Do not mix other chemicals or cleaners. Do not sprinkle on urine spillages as these are generally acidic and toxic chlorine gas will be evolved.

Storage: Store in a cool, dry, well-ventilated area, in closed containers. Do not store at temperatures above 60°C Do not store damp or contaminated material. Store away from all incompatible and combustible materials (see section 10)

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Avoid contact with skin and eyes. The use of PVC or rubber gloves and eyeshields is recommended. Avoid breathing dust. Use only in a well ventilated area.

Occupational Exposure Limits:

Hazardous Ingredient	LTEL 8hr ppm	TWA mg/m ³	STEL ppm	mg/m ³
In case of chlorine emission, the OEL for chlorine should be observed:				
Chlorine	0.5	1.5	1	2.9

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: White/ off white, flat beveled edge tablets

Odour: None to mild chlorine

pH: 5.9 typical (1 tablet in 1 litre of water)

Flash Point °C 240-250°C

Relative Density (20°C) Each tablet contains 1670mg sodium dichloroisocyanurate (50% w/w) in an effervescent base.

Solubility in Water Soluble, effervescent

10 STABILITY AND REACTIVITY

Stability: Stable under normal conditions. On contact with moisture product decomposes to chlorine, hypochlorous acid and cyanuric acid.

Conditions to Avoid: High temperatures, heat sources and naked flames. Decomposes at temperatures above 250°C, liberating toxic gases. Moisture. High humidity levels.

Materials to Avoid: Organic materials, acids, oils, greases, sawdust, alkalis, other oxidizers, nitrogen-containing compounds, dry fire extinguishers containing mono-ammonium phosphates.

Hazardous Decomposition Products: Chlorine gas.

11 TOXICOLOGICAL INFORMATION

Inhalation: May irritate or cause nausea only if significant quantities of dust present.

Ingestion: Should a single tablet be ingested, no short or long term effect should result, other than a possibly mildly upset stomach. Harmful if swallowed in quantity. NaDCC acute oral oxicity LD₅₀ (rat): 1.67g/kg LD₅₀ (rabbit): 2.0 to 2.5g/kg. No toxicity to dogs was found. Allowing for a two fold higher sensitivity than rats for humans, the likely lethal dose would be 35 tablets (58g NaDCC) for a 70kg adult and 6 tablets (10G NaDCC) for a 12kg Child.

Skin: No irritate on the skin was observed after application of sodium dichloroisocyanurate (NaDCC) in the form of undiluted, dry power for 24 hours. Occasional splashes of Covclor tablet solution are unlikely to cause damage.

Eyes: May irritate but unlikely to cause permanent damage. No eye damage or irritation was caused by the daily instillation of 333ppm solution of NaDCC in the eye of each of 5 albino rabbits for 5 days per week in 3 months.

12 ECOLOGICAL INFORMATION

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not release into surface waters.

The following LC₅₀ values have been obtained for the active ingredient sodium dichloroisocyanurate:

- Rainbow Trout (96hrs exposure) 0.22mg/l
- Bluegill Sunfish (96hrs exposed) 0.28mg/l
- Daphnia Magna (24hrs exposure) 0.55mg/l

13 DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose of according to Local Authority regulations. Care must be taken to prevent environmental contamination from the use of this material, also to prevent accidental ingestion.

14 TRANSPORT INFORMATION

Road: Not classified as hazardous (Limited quantities)
UN No: (200/pack) 2465
TREM Card No: -
ADR/RID Class: Class 5.1
IMDG Class and Packaging Group: Class 5.1 packing Group 2
Proper Shipping Name: Dangerous goods in limited quantities of class 5.1
Marine Pollutant: No
Customs Tariff: 3402 90 90

15 REGULATORY INFORMATION

CHIP Classification: Harmful, oxidising
Hazard Symbol: Xn, O

Risk Phrases: R8 Contact with combustible material may cause fires.
R22 Harmful if swallowed
R31 Contact with acid liberates toxic gas
R36/37 Irritating to eyes and respiratory system.

Safety Phrases: S2 Keep out of reach of children
S8 Keep container dry
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S41 In case of fire and/or explosion, do not breathe fumes.

16 OTHER INFORMATION

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. However, the information is provided without any warranty, express or implied regarding its correctness.

Text of the R-phrases that are allocated to the ingredients listed in section 2 of this safety data sheet.

R8 Contact with combustible material may cause fires.
R22 Harmful if swallowed
R31 Contact with acid liberates toxic gas
R36/37 Irritating to eyes and respiratory system.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment