

# SUD-CHEMIE CONTAINER DRI II

Chemwatch Independent Material Safety Data Sheet

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NC317ECP

CHEMWATCH 8068-71

Version No:4

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

SUD-CHEMIE CONTAINER DRI II

### SYNONYMS

CDII, "Product Codes: 3732, 3732-1"

### PRODUCT USE

Humidity reduction - removes excess moisture in shipping containers.

### SUPPLIER

Company: Sud- Chemie Australia Pty Ltd

Address:

12 Peachtree Road

Penrith

NSW 2750

AUS

Telephone: +61 2 47 321 421

Emergency Tel: +61 2 47 321 421 (9.00am to 5.00pm

Monday to Friday)

Fax: +61 2 47 321 678

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## Section 2 - HAZARDS IDENTIFICATION

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### STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

### POISONS SCHEDULE

None

### RISK

None under normal operating conditions.

### SAFETY

Safety Codes

Safety Phrases

S24

■ Avoid contact with skin.

S39

■ Wear eye/ face protection.

S26

■ In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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NAME	CAS RN	%
amylopectin	9037-22-3	>60

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## **Section 4 - FIRST AID MEASURES**

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### **SWALLOWED**

- - Not considered a normal route of entry.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

### **EYE**

- If this product comes in contact with the eyes:
  - Wash out immediately with fresh running water.
  - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
  - If pain persists or recurs seek medical attention.
  - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### **SKIN**

- Brush off dust.

### **INHALED**

- - If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear breathing passages.
- Ask patient to rinse mouth with water but to not drink water.
- Seek immediate medical attention.

### **NOTES TO PHYSICIAN**

- Treat symptomatically.

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## **Section 5 - FIRE FIGHTING MEASURES**

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### **EXTINGUISHING MEDIA**

- - Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

### **FIRE FIGHTING**

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

### **FIRE/EXPLOSION HAZARD**

■ Combustible.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), chlorides.  
Avoid creating dust - may present dust explosion hazard. Dry dust can be electrostatically charged by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by grounding.

**FIRE INCOMPATIBILITY**

- Avoid contamination with strong oxidising agents as ignition may result.

**HAZCHEM: None**

**PERSONAL PROTECTION**

Glasses:

Gloves:

Respirator:

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**Section 6 - ACCIDENTAL RELEASE MEASURES**

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**MINOR SPILLS**

- - Remove all ignition sources.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Control personal contact by using protective equipment.
- Use dry clean up procedures and avoid generating dust.
- Place in a suitable, labelled container for waste disposal.

**MAJOR SPILLS**

- Remove all ignition sources.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact by using protective equipment and dust respirator.
- Prevent spillage from entering drains, sewers or water courses.
- Avoid generating dust.
- Sweep, shovel up. Recover product wherever possible.
- Put residues in labelled plastic bags or other containers for disposal.
- If contamination of drains or waterways occurs, advise emergency services.

**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

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**Section 7 - HANDLING AND STORAGE**

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**PROCEDURE FOR HANDLING**

- No special handling procedures required.

**SUITABLE CONTAINER**

Carton.

**STORAGE INCOMPATIBILITY**

- - Keep dry.
- Wet material may corrode mild steel.

**STORAGE REQUIREMENTS**

- - Keep dry.
- Store under cover.
- Store in a well ventilated area.
- Store away from sources of heat or ignition.
- Observe manufacturer's storing and handling recommendations.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

- amylopectin: CAS:9037-22-3
- calcium chloride: CAS:10043-52-4

### MATERIAL DATA

SUD-CHEMIE CONTAINER DRI II:

- None assigned. Refer to individual constituents.

AMYLOPECTIN:

■ These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease.

Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the

cellular response caused by P.N.O.C.s has the following characteristics:

- the architecture of the air spaces remain intact,
- scar tissue (collagen) is not synthesised to any degree,
- tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

- seriously reduce visibility,
- cause unpleasant deposits in the eyes, ears and nasal passages,
- contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or

by the rigorous skin

cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

- to brief exposures to higher concentrations
- nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- are insoluble or poorly soluble\* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload).

CALCIUM CHLORIDE:

■ It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum.

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically

occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA. OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

## **PERSONAL PROTECTION**

### **EYE**

- None under normal operating conditions.

### **HANDS/FEET**

- None under normal operating conditions.

### **OTHER**

- None under normal operating conditions.

## **ENGINEERING CONTROLS**

- None under normal operating conditions.

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## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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### **APPEARANCE**

- Material is hygroscopic, absorbs moisture from surrounding air. Small white hygroscopic granules mixed with off white powder. No odour. Packed in white sachets 14cm x 31cm.

### **PHYSICAL PROPERTIES**

Mixes with water.

Molecular Weight: Not applicable

Boiling Range (°C): 1935 (salt)

Melting Range (°C): Not available

Specific Gravity (water=1): 1.4	Solubility in water (g/L): Miscible	pH (as supplied): Not applicable
pH (1% solution): Not available	Vapour Pressure (kPa): Not Applicable	Volatile Component (%vol): Not Applicable
Evaporation Rate: Not Applicable	Relative Vapour Density (air=1): Not Applicable	Flash Point (°C): Not Applicable
Lower Explosive Limit (%): Not Applicable	Upper Explosive Limit (%): Not Applicable	Autoignition Temp (°C): Not available
Decomposition Temp (°C): Not available.	State: Manufactured	Viscosity: Not Applicable

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## **Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION**

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### **CONDITIONS CONTRIBUTING TO INSTABILITY**

- - Presence of incompatible materials.
  - Product is considered stable.
  - Hazardous polymerisation will not occur.
- For incompatible materials - refer to Section 7 - Handling and Storage.

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## **Section 11 - TOXICOLOGICAL INFORMATION**

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### **POTENTIAL HEALTH EFFECTS**

#### **ACUTE HEALTH EFFECTS**

##### **SWALLOWED**

- Not normally a hazard due to physical form of product.
- Ingestion may result in nausea, abdominal irritation, pain and vomiting.

##### **EYE**

- Not normally a hazard due to physical form of product.
- Generated dust may be discomforting.

##### **SKIN**

- Not normally a hazard due to physical form of product.
- Generated dust may be discomforting.  
Solution of material in moisture on the skin, or perspiration, may increase irritant effects.  
Open cuts, abraded or irritated skin should not be exposed to this material. The material may accentuate any pre-existing dermatitis condition.

##### **INHALED**

- Not normally a hazard due to physical form of product.
- Generated dust may be discomforting.  
Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.  
If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.

#### **CHRONIC HEALTH EFFECTS**

- Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

## TOXICITY AND IRRITATION

- Not available. Refer to individual constituents.

### AMYLOPECTIN:

- No significant acute toxicological data identified in literature search.

### CALCIUM CHLORIDE:

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

#### TOXICITY

Oral (rat) LD50: 1000 mg/kg

#### IRRITATION

Skin (unknown): moderate\*

Eye (unknown): severe\* [ICI]

- The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

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## Section 12 - ECOLOGICAL INFORMATION

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Refer to data for ingredients, which follows:

### SUD-CHEMIE CONTAINER DRI II:

Readily degradable.

Not regarded as eco toxic.

### CALCIUM CHLORIDE:

- Fish LC50 (96hr.) (mg/l): 8.4 (24hr)

- Although inorganic chloride ions are not normally considered toxic they can exist in effluents at acutely toxic levels (chloride >3000 mg/l). the resulting salinity can exceed the tolerances of most freshwater organisms.

Inorganic chlorine eventually finds its way into the aqueous compartment and as such is bioavailable. Incidental exposure to inorganic chloride may occur in occupational settings where chemicals management policies are improperly applied.

The toxicity of chloride salts depends on the counter-ion (cation) present; that of chloride itself is unknown. Chloride toxicity has not been observed in humans except in the special case of impaired sodium chloride metabolism, e.g. in congestive heart failure . Healthy individuals can tolerate the intake of large quantities of chloride provided that there is a concomitant intake of fresh water.

Although excessive intake of drinking-water containing sodium chloride at concentrations above 2.5 g/litre has been reported to produce hypertension, this effect is believed to be related to the sodium ion concentration.

Chloride concentrations in excess of about 250 mg/litre can give rise to detectable taste in water, but the threshold depends

upon the associated cations. Consumers can, however, become accustomed to concentrations in excess of 250 mg/litre. No

health-based guideline value is proposed for chloride in drinking-water.

In humans, 88% of chloride is extracellular and contributes to the osmotic activity of body fluids. The electrolyte balance in the

body is maintained by adjusting total dietary intake and by excretion via the kidneys and gastrointestinal tract. Chloride is almost completely absorbed in normal individuals, mostly from the proximal half of the small intestine. Normal fluid loss amounts to about 1.5-2 liters/day, together with about 4 g of chloride per day. Most (90 - 95%) is excreted in the urine, with minor amounts in faeces (4- %) and sweat (2%)

Chloride increases the electrical conductivity of water and thus increases its corrosivity. In metal pipes, chloride reacts with metal ions to form soluble salts thus increasing levels of metals in drinking-water. In lead pipes, a protective oxide layer is built up, but chloride enhances galvanic corrosion. It can also increase the rate of pitting corrosion of metal pipes.

- DO NOT discharge into sewer or waterways.

### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Sud-Chemie Container Dri II		No data		
amylopectin		No data		
calcium chloride		No data	LOW	

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### Section 13 - DISPOSAL CONSIDERATIONS

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- - Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

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### Section 14 - TRANSPORTATION INFORMATION

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HAZCHEM: None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

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### Section 15 - REGULATORY INFORMATION

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**POISONS SCHEDULE: None**

#### REGULATIONS

Regulations for ingredients

**amylopectin (CAS: 9037-22-3) is found on the following regulatory lists;**  
 "Australia Inventory of Chemical Substances (AICS)"

**calcium chloride (CAS: 10043-52-4) is found on the following regulatory lists;**  
 "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD Representative List of High Production Volume (HPV) Chemicals"

**No data for Sud-Chemie Container Dri II (CW: 8068-71)**

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## **Section 16 - OTHER INFORMATION**

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■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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This is the end of the MSDS.