

TRULUX SAFETY DATA SHEET

Provides critical information on hazardous substances or mixtures.

1.1 COMPANY IDENTIFICATION

Company's name:	Trulux Pty Ltd
Email address:	info@trulux.com.au
Website:	www.trulux.com.au
Contact number:	+61 2 5566 0566

1.2 PRODUCT IDENTIFICATION

Trade name:	ZNO-C-NJE3
SKU:	RMTR-0301A
Classification:	Refer to clause 2

1.3 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified uses:	Raw Material
Uses advised against:	No further information available.

1.4 DETAILS OF THE SUPPLIER OF THE SUBSTANCE INFORMATION SHEET

Supplier's name:	Trulux Pty Ltd
Website:	www.trulux.com.au
Address:	C3/ 1-3 Rodborough Road, Frenchs Forest NSW 2086 Australia

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Doc: RMSDS - ZNO-C-NJE3

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1.5 EMERGENCY CONTACTS - INSTITUTIONAL CENTRES

Australia Poisons Information Centre 13 11 26

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

ChemWatch Hazard Ratings

Flammability 0

Toxicity 1

Body Contact 1

Reactivity 0

Chronic 2

0 = Minimum 1 = Low 2 = Moderate 3 = High 4 = Extreme

Classification ^[1]

Specific target organ toxicity - repeated exposure Category 2, Chronic Aquatic Hazard Category 1

Legend:

1. Classified by Chemwatch

Label elements

Hazard pictogram(s)



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Signal word

Warning

Hazard statement(s)

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

P260 Do not breathe dust/fume.

P273 Avoid release to the environment

Precautionary statement(s) Response

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorized hazardous or special waste collection point in accordance with any local regulation.

3 COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%)
Zinc oxide	1314-13-2	95 - 98

4 FIRST AID MEASURES

Eye Contact

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. Seek

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medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhalation

If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.

Ingestion

If swallowed do NOT induce vomiting. If vomiting occurs, lean the patient forward or place on the 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 the casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Absorption of zinc compounds occurs in the small intestine. The metal is heavily protein bound. Elimination results primarily from faecal excretion. The usual measures for decontamination (Ipecac Syrup, lavage, charcoal or cathartics) may be administered, although patients usually have sufficient vomiting not to require them. CaNa₂EDTA has been used successfully to normalize zinc levels and is the agent of choice.

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5 FIRE FIGHTING MEASURES

Extinguishing media

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

Advice for firefighters

Fire Fighting

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding 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

Non combustible. Not considered a significant fire risk, however containers may burn.

HAZCHEM

2Z.

6 ACCIDENTAL RELEASE MEASURES

Methods and material for containment and cleaning up

Minor Spills

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

Major Spills

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Environmental hazard - contain spillage.

Moderate hazard.

CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard.

Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Recover product wherever possible. IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains. If contamination of drains or waterways occurs, advise Emergency Services.

7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

Avoid all personal contact, including inhalation.

Wear protective clothing when risk of exposure occurs.

Use in a well-ventilated area.

Prevent concentration in hollows and sumps.

DO NOT enter confined spaces until atmosphere has been checked.

DO NOT allow material to contact humans, exposed food or food utensils.

Avoid contact with incompatible materials.

When handling, DO NOT eat, drink or smoke.

Keep containers securely sealed when not in use.

Avoid physical damage to containers.

Always wash hands with soap and water after handling.

Work clothes should be laundered separately.

Launder contaminated clothing before re-use.

Use good occupational work practice.

Observe manufacturer's storage and handling recommendations contained within this SDS.

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Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Other information

Store in original containers.

Keep containers securely sealed.

Store in a cool, dry area protected from environmental extremes.

Store away from incompatible materials and foodstuff containers.

Protect containers against physical damage and check regularly for leaks.

Observe manufacturer's storage and handling recommendations contained within this SDS.

For major quantities:

Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams).

Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities.

Conditions for safe storage, including any incompatibilities

Suitable container

Polyethylene or polypropylene container.

Check all containers are clearly labelled and free from leaks.

Storage incompatibility

Avoid strong acids, bases. Avoid reaction with oxidising agents.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits (OEL)

Source	Ingredient	Material name	TWA	STEL	Note
Australia Exposure Standards	zinc oxide	Zinc oxide (fume)	5 mg/m ³	10 mg/m ³	Not Available

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Australia Exposure Standards	zinc oxide	Zinc oxide (dust)	10 mg/m ³	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
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Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
zinc oxide	10 mg/m ³	15 mg/m ³	2,500 mg/m ³

Ingredient	Original IDLH
zinc oxide	500 mg/m ³

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.

An approved self contained breathing apparatus (SCBA) may be required in some situations.

Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)

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aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal protection



Eye and face protection

Safety glasses with side shields.

Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each

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workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than

240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.

- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to

EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.

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- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
- Contaminated gloves should be replaced.

As defined in ASTM F-739-96 in any application, gloves are rated as:

- Excellent when breakthrough time > 480 min
- Good when breakthrough time > 20 min
- Fair when breakthrough time < 20 min
- Poor when glove material degrades

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- ❖ Polychloroprene.
- ❖ Nitrile rubber.
- ❖ Butyl rubber.

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- ❖ fluorocautchouc.
- ❖ Polyvinyl chloride.

Gloves should be examined for wear and/ or degradation constantly.

Other protection

- ❖ Overalls.
- ❖ P.V.C apron.
- ❖ Barrier cream.
- ❖ Skin cleansing cream.
- ❖ Eye wash unit.

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	- -	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 °C)

- ❖ Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- ❖ The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat

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stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

- ❖ Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- ❖ Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- ❖ Use approved positive flow mask if significant quantities of dust becomes airborne.
- ❖ Try to avoid creating dust conditions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White powder with no odour, insoluble in water.
Physical State:	Divided Solid.
Melting point/ freezing point:	1975 °C
Relative density (Water= 1):	8.5-10.5 (bulk)
Water solubility:	Immiscible

10 STABILITY AND REACTIVITY

Chemical Stability: Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.

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11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

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.

Effects on lungs are significantly enhanced in the presence of respirable particles.

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

Inhalation of freshly formed zinc oxide particles sized below 1.5 microns and generally between 0.02 to 0.05 microns may result in "metal fume fever", with symptoms resembling influenza. Symptoms may be delayed for up to 12 hours and begin with the sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalised feeling of malaise. Mild to severe headache, nausea, occasional vomiting, fever or chills, exaggerated mental activity, profuse sweating, diarrhoea, excessive urination and prostration may also occur. Tolerance to the fumes develops rapidly, but is quickly lost. All symptoms usually subside within 24-36 hours following removal from exposure. Leucocytosis, a transient increase in white blood cell counts, is reported as a common finding in metal fume fever but is not known to be common amongst welders. Severe over-exposure to zinc oxide, following inhalation of fumes or finely divided dusts may result in bronchitis or pneumonia; a bluish skin tint may be present.

Ingestion

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The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.

Skin Contact

There is some evidence to suggest that the material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

Open cuts, abraded or irritated skin should not be exposed to this material.

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Eye

There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

Chronic

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Overexposure to the breathable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity and chest infections. Repeated exposures in the workplace to high levels of fine-divided dusts may produce a condition known as pneumoconiosis, which is the lodgement of any inhaled dusts in the lung, irrespective of the effect. This is particularly true when a significant number of particles less than 0.5 microns (1/50000 inch) are present. Lung shadows are seen in the X-ray. Symptoms of pneumoconiosis may include a progressive dry cough, shortness of breath on exertion, increased chest expansion, weakness and weight loss.

As the disease progresses, the cough produces stringy phlegm, vital capacity decreases further, and shortness of breath becomes more severe. Other signs or symptoms include changed breath sounds, reduced oxygen uptake during exercise, emphysema and rarely, pneumothorax (air in the lung cavity).

Removing workers from the possibility of further exposure to dust generally stops the progress of lung abnormalities. When there is high potential for worker exposure, examinations at regular period with emphasis on lung function should be performed.

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Inhaling dust over an extended number of years may cause pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent tissue reaction. This may or may not be reversible.

Welding or flame cutting of metals with zinc or zinc dust coatings may result in inhalation of zinc oxide fume; high concentrations of zinc oxide fume may result in "metal fume fever"; also known as "brass chills", an industrial disease of short duration. [I.L.O] Symptoms include malaise, fever, weakness, nausea and may appear quickly if operations occur in enclosed or poorly ventilated areas.

zinc oxide

TOXICITY	IRRITATION
dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit) : 500 mg/24 h - mild
Inhalation(Rat) LC50; >1.79 mg/l4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
Oral(Rat) LD50; >5000 mg/kg ^[1]	Skin (rabbit) : 500 mg/24 h- mild
	Skin: no adverse effect observed (not irritating) ^[1]

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity.

ZINC OXIDE

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.

12 ECOLOGICAL INFORMATION

Toxicity

zinc oxide

Endpoint	Test Duration (hr)	Species	Value	Source
BCF	1344h	Fish	19-110	7

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NOEC(ECx)	72h	Algae or other aquatic plants	0.005mg/l	2
EC50	72h	Algae or other aquatic plants	0.036-0.049mg/l	4
EC50	48h	Crustacea	0.301-0.667mg/l	4
LC50	96h	Fish	0.002-0.008mg/L	4
EC50	96h	Algae or other aquatic plants	0.3mg/l	2

Legend:

Extracted from

1. IUCLID Toxicity Data
2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity
3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated)
4. US EPA, Ecotox database - Aquatic Toxicity Data
5. ECETOC Aquatic Hazard Assessment Data
6. NITE (Japan) - Bioconcentration Data
7. METI (Japan) - Bioconcentration Data
8. Vendor Data

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

DO NOT discharge into sewer or waterways.

Bioaccumulative potential

Ingredient	Bioaccumulation
Zinc oxide	LOW (BCF = 217)

13 DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product / Packaging disposal

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Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- ❖ Reduction
- ❖ Reuse
- ❖ Recycling
- ❖ Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. In most instances the supplier of the material should be consulted.

- ❖ DO NOT allow wash water from cleaning or process equipment to enter drains.
- ❖ It may be necessary to collect all wash water for treatment before disposal.
- ❖ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ❖ Where in doubt contact the responsible authority.
- ❖ Recycle wherever possible or consult manufacturer for recycling options.
- ❖ Consult State Land Waste Management Authority for disposal.
- ❖ Bury residue in an authorised landfill.
- ❖ Recycle containers if possible, or dispose of in an authorised landfill.

14 TRANSPORT INFORMATION

Labels Required



Marine Pollutant

Trade Name: ZNO-C-NJE3
Trulux SKU RMTR-0301A
Doc: RMSDS - ZNO-C-NJE3

Issue date: 03/02/2022
Review date: 03/02/2022
Version: 02

TRULUX SAFETY DATA SHEET

Provides critical information on hazardous substances or mixtures.



HAZCHEM

2Z

Land transport (ADG)

UN number: 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(contains zinc oxide)
Transport hazard class(es): Class: 9
Subrisk: Not Applicable.
Packing group: III
Environmental hazard: Environmentally hazardous
Special precautions for user: Special provisions: 274 331 335 375 AU01
Limited quantity: 5 kg

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

(a) packagings;

(b) IBCs; or

(c) any other receptacle not exceeding 500 kg(L).

- Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

Air transport (ICAO-IATA / DGR)

UN number: 3077
UN proper shipping name: Environmentally hazardous substance, solid, n.o.s. * (contains zinc oxide)
Transport hazard class(es): ICAO/IATA Class: 9
ICAO / IATA Subrisk: Not Applicable
ERG Code: 9L

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Packing group: III
Environmental hazard: Environmentally hazardous
Special precautions for user: Special provisions: A97 A158 A179 A197 A215
Cargo Only Packing Instructions: 956
Cargo Only Maximum Qty / Pack: 400 kg
Passenger and Cargo Packing Instructions: 956
Passenger and Cargo Maximum Qty / Pack: 400 kg
Passenger and Cargo Limited Quantity Packing Instructions: Y956
Passenger and Cargo Limited Maximum Qty / Pack: 30 kg G

Sea transport (IMDG-Code / GGVSee)

UN number: 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(contains zinc oxide)
Transport hazard class(es): IMDG Class: 9
IMDG Subrisk: Not Applicable
Packing group: III
Environmental hazard: Marine Pollutant
Special precautions for user: EMS Number: F-A , S-F
Special provisions: 274 335 966 967 969
Limited Quantities: 5 kg

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable.

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
Zinc oxide	Not Available.

Transport in bulk in accordance with the ICG Code

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Product name	Group
Zinc oxide	Not Available.

15 REGULATORY AND OTHER INFORMATION

Safety, health and environmental regulations specific for the mixture or substance:

zinc oxide is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	Yes
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes

Legend:

Yes = All CAS declared ingredients are on the inventory.

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No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets).

16 OTHER INFORMATION

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition or other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. This sheet completes the technical sheets but it does not replace them. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied is made and Trulux Pty Ltd assumes no legal responsibility or liability whatsoever resulting from its use. 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. This listing must not be considered exhaustive. It does exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible. The information and recommendations contained herein are to the best of the manufacturer's knowledge and belief accurate and reliable as of the date indicated. No representation warranty or guarantee, however, is made with regard to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy itself as to the suitability and completeness of such information for its own particular use.

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