

MATERIAL SAFETY DATA SHEET**1. IDENTIFICATION OF PRODUCT AND COMPANY**

Product: Unidri 100N
Company: Ronacrete (Far East) Ltd., 16/F, No. 3 Lockhart Rd,
Wanchai, Hong Kong SAR
Tel/Fax: +852 2865 5872 / +852 2865 5568

2. COMPOSITION

| Chemical Name: | CAS Number: | Proportion: |
|-------------------------|---------------|-------------|
| Isobutyltriethoxysilane | [017-980-471] | > 99 % |
| Unidentified Impurities | | < 1% |

3. HAZARDS IDENTIFICATION

Acute:
Swallowed: Small amounts transferred to the mouth by fingers during use should not injure.
Eye: Vapours may irritate and cause pain and watering. Direct contact irritates slightly with redness and swelling.
Skin: A single short exposure (less than 24 hours) may irritate.
Inhaled: Vapours may irritate respiratory passage.
Chronic:
Swallowed: Repeated swallowing or swallowing large amounts may injure internally
Skin: Repeated prolonged contact (24 to 48 hours) may irritate seriously.
Inhaled: Repeated or prolonged exposure may injure the following organs: Liver, Blood, Kidneys.
Others:
Carcinogens: None Known
Teratogens: None Known
Mutagens: None Known
Reproductive Toxins: Prolonged overexposure to Ethanol has caused human birth defects
Sensitizers: None Known

4. FIRST AID MEASURES

Take off all contaminated clothing. If it is safe, remove to fresh air.
After inhalation: Provide fresh air, if feeling unwell seek medical advice.
After skin contact: Wash off with plenty of water and soap immediately, seek medical advice if necessary.
After eye contact: Immediately rinse with water for 15 minutes and seek medical advice.
After ingestion: Seek medical advice immediately.
First Aid Facilities: None should be required.
Advice to Doctor: Treat Symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Foam, water spray, CO2, dry powder.
In case of fire cool endangered containers with water. Vapours are heavier than air and may travel to a source of ignition and flash back.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Provide sufficient ventilation. Keep away from sources of ignition - no smoking.
Environmental precautions : Keep away from drains, waters and soil.

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Methods for cleaning up : Take up mechanically with an absorbent material i.e. sand, sawdust, and universal absorbent. For large spills, provide diking or other appropriate containment to keep material from spreading. Final cleaning with steam, solvents or detergents may require to prevent slip hazard. Dispose with respect to local regulations, dispose of to suitable waste incineration plant.

7. HANDLING AND STORAGE

Handling: Provide sufficient ventilation. Product evolves ethyl alcohol on exposure to water or humid air. Avoid contact with skin and eyes. Do not inhale vapours. **DO NOT** take internally. Do Not wear contaminated clothing. Wash at mealtime and end of shift.

Application processing: Provide good ventilation.

Protect against fire/explosion: Take precautionary measures against static charges. Keep away from sources of ignition - no smoking.

Storage: Keep containers tightly closed and store in a cool, well ventilated place. Protect from moisture, heat, sparks and flame

Incompatibility: Store away from oxidising material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in well ventilated area. Local exhaust and general ventilation recommended.

Personal Protection: Avoid contact with skin and eyes. Do not inhale vapours. Do Not take internally. Do Not wear contaminated clothing. Wash at mealtime and end of shift.

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided. Suitable respirator such as Organic Vapor/Dust/Mist/Fume Type can be use.

Hand protection: Wear suitable protective gloves such as nitrile rubber or natural rubber.

Eye protection: Close fitting protective goggle (e.g. chemical worker's goggle).

Flammability: Static electricity will accumulate and may ignite vapours. Prevent a possible fire Hazard by bonding and grounding or inert gas purge. Do not uses close to ignition source. Keep container closed.

Exposure Standards: Isobutyltriethoxysilane: See ethyl alcohol comments.

Unidentified Impurities: See ethyl alcohol comments.

Ethyl alcohol: TWA 1000 ppm. OSHA PEL and ACGIH TLV: TWA 1000 ppm. Ethyl alcohol is formed upon contact with water or humid air. Provide ventilation to control exposure within WORKSAFE/OSHA guidelines.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless to pale yellow

Physical form: Liquid

Odor: Alcoholic odor

Solvent: None

Boiling Point: > 65 oC

Melting Point: Not determined

Vapour Pressure (20oC): Not determined

Specific Gravity (25 oC): 0.88

Flashpoint (close cup): 62 oC

Lower Flammability Limits: Not determined

Upper Flammability Limits: Not determined

Solubility in Water (20oC): Not miscible

Refractive Index: 1.400

Viscosity (20oC): < 10cSt

VOC: < 425 grams per litre

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10. STABILITY AND REACTIVITY

Hazardous reactions: Hazardous vapors may form due to possible reactions with water, moisture, or humid air. Oxidising material can cause a reaction.

Hazardous decomposition products: Silicon dioxide. Carbon oxides and traces of incompletely burned carbon compounds.

Hazardous Polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

No data available.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Dispose with respect to local regulations, dispose of to suitable waste incineration plant.

14. TRANSPORT INFORMATION

Correct Shipping Name: Not applicable
UN Number: Not applicable
Dangerous Goods (Class and Subs Risk): Not applicable
IATA Dangerous Goods Class: Not subject to IATA regulations
IMDG Dangerous Goods Class: Not subject to IMDG regulations
Hazchem Code: Not applicable
Poisons Schedule Number: Not applicable

15. REGULATORY INFORMATION

According to the dangerous Preparation Directive (88/379/EEC)

Hazard symbol: Xi = Irritant

R-phrases: R38 Irritating to eyes, respiratory system and skin.

S-phrases: S23(S) Do not breathe spray.
S24/25 Avoid contact with skin
S37/39 Wear suitable gloves and eye/face protection
S51 Use only in well-ventilated areas.

Type of Regulated Paint under the Air Pollution Control (Volatile Organic Compounds) Regulation of Hong Kong: Waterproofing concrete or masonry sealers

16. OTHER INFORMATION

The information given here is to the best of our knowledge true and accurate and is provided solely for making safety assessments. It is not a sales specification or an indication of suitability for a particular use.
