


Section 1: Identification	
Common Name/Trade Name	KETOCONAZOLE USP
Supplier Information	<p>Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693</p> <p>IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)</p>
Distributor Name	<p>Bella Corp Trading Pty Ltd 6/34 Dominions Road, Ashmore QLD 4214, Australia Telephone: 07 5597 4169 Email: bellacorp@bellacorp.com.au</p>
Product Synonym(s)	cis-1-acetyl-4-[(2-(2, 4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-", "1, 3-", dioxolan-4-yl]-methoxy]phenyl]piperazine
Relevant Use(s) of Product	Manufacture or Compounding of Substances

Section 2: Hazards Identification	
Classification of Substance or Mixture	Acute toxicity, Oral (Category 3), Reproductive toxicity (Category 2), Acute aquatic toxicity (Category 2), Chronic aquatic toxicity (Category 2)
Signal Word	Danger
Hazard Statement(s)	<p>H301 Toxic if swallowed H361d Suspected of damaging the unborn child H401 Toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects</p>
Pictogram(s)	
Precautionary Statement(s)	<p>P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P281 Use personal protective equipment as required. P301+P310 IF SWALLOWED Immediately call a POISON CENTER or doctor/physician. P308+P313 IF exposed or concerned Get medical advice/attention. P330 Rinse mouth. P391 Collect spillage. P405 Store locked up. P501 Dispose of contents/container to an approved waste disposal plant.</p>
Hazards Not Otherwise Classified	No data available
Ingredient(s) with Unknown Toxicity	No data available

Section 3: Composition/Information on Ingredients	
Chemical Name	N/A
Common Name	Ketoconazole
CAS Number	65277-42-1
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures

General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If Inhaled	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.
In Case of Skin Contact	Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
In Case of Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with 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. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
If Swallowed	IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. Urgent hospital treatment is likely to be needed. In the meantime, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS. Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise: INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. NOTE: Wear a protective glove when inducing vomiting by mechanical means.
Most Important Symptoms and Effects	No data available.

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Water spray or fog. Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide
Special Hazards Arising From the Substance/Mixture	Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.
Special PPE and/or Precautions for Firefighters	Gas tight chemical resistant suit. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use firefighting 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.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	MINOR SPILLS: Wear protective clothing, gloves, safety glasses and dust respirator. Avoid breathing dust and contact with skin and eyes. MAJOR SPILLS: Wear full body protective clothing with breathing apparatus.
Methods and Materials Used for Containment	MINOR SPILLS: Clean up waste regularly and abnormal spills immediately. Avoid breathing dust and contact with skin and eyes. Use dry clean up procedures and avoid generating dust. Vacuum up or sweep up. NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type) (consider explosion proof machines designed to be grounded during storage and use). Dampen with water to prevent dusting before sweeping. Place in suitable containers for disposal. MAJOR SPILLS: Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralize/decontaminate residue. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.
Cleanup Procedures	MINOR SPILLS: Clean up waste regularly and abnormal spills immediately. Avoid breathing dust and contact with skin and eyes. Use dry clean up procedures and avoid generating dust. Vacuum up or sweep up. NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type) (consider explosion proof machines designed to be grounded during storage and use). Dampen with water to prevent dusting before sweeping. Place in suitable containers for disposal. MAJOR SPILLS: Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralize/decontaminate residue. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

Section 7: Handling and Storage

Precautions for 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 storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source. Do NOT cut, drill, grind or weld such containers. In addition, ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorization or permit.
Conditions for Safe Storage	Avoid reaction with oxidizing agents. Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

Section 8: Exposure Controls/Personal Protection

Components with Workplace Control Parameters	Not established.
Appropriate Engineering Controls	To prevent contamination and overexposure, no open handling of powder should be allowed. Powder handling operations are to be done in powders weighing hood, a glove box, or other equivalent ventilated containment system. In situations where these ventilated containment hoods have not been installed, a non-ventilated enclosed containment hood should be used. Pending changes resulting from additional air monitoring data, up to 300 mg can be handled outside of an enclosure provided that no grinding, crushing or other dust-generating process occurs. An air-purifying respirator should be worn by all personnel in the immediate area in cases where non-ventilated containment is used, where significant amounts of material (e.g., more than 2 grams) are used, or where the material may become airborne (as through grinding, etc.). Powder should be put into solution or a closed or covered container after handling. If using a ventilated enclosure that has not been validated, wear a half-mask respirator equipped with HEPA cartridges until the enclosure is validated for use.
PPE - Eye/Face Protection	For laboratory, larger scale or bulk handling or where regular exposure in an occupational setting occurs: Chemical goggles. Face shield. Full face shield may be required for supplementary but never for primary protection of eyes
PPE - Skin Protection	Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as: 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). 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) 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) is recommended. Contaminated gloves should be replaced.
PPE - Body Protection	Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Glove must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skincontact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
PPE - Respiratory Protection	An air-purifying respirator should be worn by all personnel in the immediate area in cases where non-ventilated containment is used, where significant amounts of material (e.g., more than 2 grams) are used, or where the material may become airborne (as through grinding, etc.). If using a ventilated enclosure that has not been validated, wear a half-mask respirator equipped with HEPA cartridges until the enclosure is validated for use.

Section 9: Physical and Chemical Properties

Appearance	Crystals
Upper/Lower Flammability or Explosive Limits	Not available
Odor	No data available
Vapor Pressure	No applicable
Odor Threshold	No data available
Vapor Density	Not applicable
pH	Not applicable
Relative Density	No data available
Melting Point/Freezing Point	146 C
Solubility	Partly soluble in water. Miscible.
Initial Boiling Point and Boiling Range	Not available
Flash Point	Not available
Evaporation Rate	Not applicable
Flammability (Solid, Gas)	No data available
Partition Coefficient	No data available
Auto-Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not applicable

Section 10: Stability and Reactivity

Reactivity	No data available
Chemical Stability	Product is considered stable.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Presence of incompatible materials.
Incompatible Materials	Refer to section 7.
Hazardous Decomposition Products	Hazardous polymerization will not occur.

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	Oral (rat) LD50: 166 mg/kg
Acute Toxicity - Inhalation	No data available
Acute Toxicity - Dermal	No data available
Acute Toxicity - Eye	No data available
Skin Corrosion/Irritation	No data available
Serious Eye Damage/Irritation	No data available
Respiratory or Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity IARC	No data available
Carcinogenicity ACGIH	No data available
Carcinogenicity NTP	No data available
Carcinogenicity OSHA	No data available
Reproductive Toxicity	No data available
Specific Target Organ Toxicity - Single Exposure	No data available
Specific Target Organ Toxicity - Repeated Exposure	No data available
Aspiration Hazard	No data available

Section 12: Ecological Information

Toxicity	Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. DO NOT discharge into sewer or waterways.
Persistence and Degradability	No data available
Bio-accumulative Potential	No data available
Mobility in Soil	No data available
Other Adverse Effects	No data available.

Section 13: Disposal Considerations

Waste Treatment Methods Product	Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorized landfill. Where possible retain label warnings and MSDS and observe all notices pertaining to the product. 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).
Waste Treatment Methods Packaging	No data available
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	2811
UN Proper Shipping Name	Toxic solids, organic n.o.s. (Ketoconazole)
Transport Hazard Class(es)	6.1
Packaging Group	III
Environmental Hazards	No data available

Section 15: Regulatory Information

No further information available.

Section 16: Other Information

Additional Information	N/A
Prepared By	Scarlotte Smith
Revision Date	09/17/2021 12:50

Disclaimer

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