



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

ZHEJIANG RAYFULL CHEMICALS CO., LTD

ADD: NO.52 PUCHANG ROAD, PUZHOU INDUSTRIAL PARK, LONGWAN DISTRICT,
WENZHOU ZHEJIANG P.R. CHINA

Tel: +86-577-88905587

Fax: +86-577-88905567

Email: info@rayfull.com

sales@rayfull.com

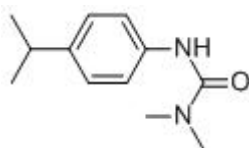
1. Chemical Product Identification

Common Name: Isoproturon 95% TC

Molecular Formula: C₁₂H₁₈N₂O

Molecular Weight: 206.28

Structural Formula:



Chemical Name: 3-(4-isopropylphenyl)-1,1-dimethylurea

Form: Powder

Color: White

CAS No.: 34123-59-6

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Isoproturon	34123-59-6	95
Other ingredients	---	5

3. Hazards Identification

Hazard statements: Highly flammable liquid and vapor. Toxic if inhaled. Suspected of causing cancer. Causes damage to organs.

Precautionary statements: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Do not breathe dust/



fume/gas/mist/vapors/spray. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations

4. First Aid Measures

Eye contact: Rinse eyes and eye-lids thoroughly with plenty of water for at least 15 minutes(remove contact lenses if possible) If eye irritation persists, consult a specialist.

Skin contact: Remove and wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician.

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. If swallowed, seek medical advice immediately and show this container or label.

5. Fire-Fighting Measures

Suitable extinguishing media: Water spray, Dry powder, Sand, Foam, Carbon dioxide (CO₂).

Extinguishing media which shall not be used for safety reasons: High volume water jet.

Specific hazards during firefighting: In the event of fire (NO_x,CO_x) may be formed.

Special protective equipment for firefighters: Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Further Information: Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away.

Environmental precautions: Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.



7. Handling And Storage

Precautions for safe handling:

Safe handling advice: Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities:

Requirements for storage areas and containers: Store in original container. Keep tightly closed in a dry, cool and well-ventilated place.

Advice on common storage: Keep away from food, drink and animal feeding stuffs. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Engineering measures: Ventilation required.

Hygiene measures: Wash hands thoroughly after handling. When using do not eat, drink or smoke. Wash clothing before re-using.

Respiratory system: Respirator protection is not required if good ventilation is maintained.

Skin and body: Wear suitable protective clothing. Chemical resistant boots.

Hands: Chemical resistant gloves.

Eyes: Safety goggles or face shield.

9. Physical and Chemical Properties

Appearance: White powder

pH: 6.0-8.0

Water content: $\leq 0.5\%$

Melting point: 157.3 °C

Bulk density: 1.17 g/ml

Partition Coefficient: $\log P = 2.5$ (at pH 7, 20 °C)

Vapour pressure: 5.5×10^{-3} mPa (25 °C)

Solubility: 70.2 mg/l in water (20 °C); In organic solvents: 30 g/l in acetone, 0.1 g/l in n-heptane, 46 g/l in 1,2-dichloroethane, 2 g/l in xylene (all at 20 °C).

10. Stability and Reactivity

Stability: Stable under normal conditions.

Materials to avoid: Oxidizing agents, acids, alkali.

Hazardous decomposition products: Nitrogen oxides, carbon oxides (CO, CO₂).



Hazardous Polymerization: Will not occur.

11. Toxicological Information

Acute oral LD50 for rats: 1826 a.i.mg/kg

Acute dermal LD50 for rats: >2000 a.i.mg/kg

Acute inhalation toxicity LC50 (4 h) for rats: 1.95 a.i.mg/L

Skin irritation: Non-irritating to skin (rabbits)

Eye irritation: Non-irritating to eyes (rabbits)

Skin sensitization: Not a skin sensitiser (guinea pigs).

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD50 for Bobwhite quail is 1401 a.i.mg/kg.

Effect on fish: Acute LC50 (96 h) for Rainbow trout is 37 a.i.mg/l.

Effects on aquatic invertebrates: Chronic 21 day NOEC for Daphnia magna is 0.12 a.i.mg/l.

Effects on algae: Acute 72 hour EC50 for Navicula pelliculosa is 0.013 a.i.mg/l.

Effects on bees: contact acute 48 hour LD50 is 200 a.i.µg/bee, oral acute 48 hour LD50 is 195 a.i.µg/bee.

Effects on earthworms: Acute 14 day LC50 is >1000 a.i.mg/kg.

13. Disposal Considerations

Methods of disposal: Container Disposal - Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.

14. Transport Information

Not applicable.

15. Regulatory Information

Not applicable.

16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are



ZHEJIANG RAYFULL CHEMICALS CO., LTD

Tel: +86-577-88905587,88908857

Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.