

1. IDENTIFICATION

Product Name	Imidazolidinyl Urea			
Other Names	3,3'-Bis(1-hydroxymethyl-2,5-dioxoimidazolidin-4-yl)-1,1'-methylenediurea; Imidazolidinyl Urea;; Imidurea, NF; N,N'-Methylenebis[N'-(3-(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl)urea]			
Uses	Preservative.			
Chemical Family	No Data Available			
Chemical Formula	C11H16N8O8			
Chemical Name	Imidazolidinyl Urea			
Product Description	No Data Available			
Contact Information	Organisation	Location	Telephone	Ask For
	Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000	MSDS Officer
		11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222	
	Poisons Information Centre	Westmead NSW	1800-251525 131126	
	Chemcall	Australia New Zealand	1800-127406 0800-243622 +64-3-3530199	
	National Poisons Centre	New Zealand	0800-764766	

2. HAZARD IDENTIFICATION

ADG Code	Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).		
ASCC Hazard Classification	Hazardous according to the criteria of ASCC [NOHSC:1008(2004)]		
Categories	Xi	Irritant	
Risk Phrases	R43	May cause sensitisation by skin contact.	
Safety Phrases	S24	Avoid contact with skin.	
	S37	Wear suitable gloves.	
HSNO Hazard Classification	6.4A		
Poisons Schedule (Aust)	No Data Available		

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The [EPA \(New Zealand\) web site](#) should be consulted for a full list of triggered controls and cited regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Imidazolidinyl Urea	C11H16N8O8	39236-46-9	100.0. %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Do not induce vomiting. Slowly dilute with 1-2 glasses of water and seek medical attention. Never give anything by mouth to a convulsing or unconscious person.
Eye	Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. In all cases of eye contamination, it is a sensible precaution to seek medical advice.
Skin	Remove contaminated clothing. Wash affected area with plenty of Soap and water for at least 15 minutes. Seek medical attention if irritation develops or persists. Wash clothing before reuse.
Inhaled	No specific treatment is necessary since material is not likely to be hazardous by inhalation. If exposed to excessive levels of dust or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions Aggravated by Exposure	No information available on medical conditions aggravated by exposure to this product.

5. FIRE FIGHTING MEASURES

General Measures	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
Flammability Conditions	Product is a combustible solid.
Extinguishing Media	Water, foam, carbon dioxide or dry chemical.
Hazardous Products of Combustion	During a fire, irritating and toxic gases may be formed by thermal decomposition or combustion.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Avoid accidents, clean up immediately. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Use clean, non-sparking tools and equipment.
Clean Up Procedures	Sweep up and remove to disposal container. Vacuuming or wet sweeping may be used to avoid dust dispersal. Transfer to a suitable, labelled chemical waste container and dispose of promptly as hazardous waste.
Containment	Stop leak if safe to do so. Isolate the danger area.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid handling which leads to dust formation. Avoid contact with skin and eyes. Wash thoroughly with soap and water after handling. May produce sensitization to damaged exposed skin. Wear appropriate protective equipment. Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for
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Storage	deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Store out of direct sunlight. Hygroscopic Material. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded.
Personal Protection Equipment	RESPIRATOR: Wear a dust mask where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716). EYES: Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions (AS1336/1337). HANDS: Use gloves as a standard industrial handling procedure (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Fine, Free-flowing, Hygroscopic Powder
Odour	Characteristically Mild
Colour	White
pH	6.0 - 7.5 1% in water
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling/Melting Point	No Data Available
Solubility	Very Soluble
Freezing Point	No Data Available
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available

Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Very soluble in water, soluble in propylene glycol and glycerin, slightly soluble in methanol and ethanol, not soluble in mineral oil.
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	Fire is possible at elevated temperatures or by contact with ignition sources.
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

General Information	Combustible Solid. Hygroscopic.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	Avoid exposure to moisture.ases.
Materials to Avoid	Avoid contact with strong bases.
Hazardous Decomposition Products	Toxic organic vapors/fumes, formaldehyde, other organic materials and oxides of carbon and nitrogen. During a fire, irritating and toxic gases may be formed by thermal decomposition or combustion.
Hazardous Polymerisation	Hazardous Polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<p>ACUTE ORAL LD50 5,200mg/kg (rat) 7,200mg/kg (mouse)</p> <p>ACUTE DERMAL LD50 (rabbit) >8,000mg/kg</p> <p>ACUTE INHALATION LC50 (rat) >5mg/L (4hr)</p> <p>SKIN IRRITATION Not a skin irritant at 5% aqueous solution (rabbit) Moderately irritating to abraded rabbit skin (50% aqueous solution)</p> <p>EYE IRRITATION Not an eye irritant at up to 20% aqueous solution (rabbit)</p> <p>SENSITIZATION Non-sensitizing (Human RIPT) Non-sensitizing to guinea pig skin</p> <p>MUTAGENICITY: Non-mutagenic (Ames assay)</p> <p>TERATOGENICITY: Non-teratogenic in mice</p> <p>CARCINOGENICITY: No evidence of carcinogenic potential</p> <p>OTHER INFORMATION Phototoxicity: Non-phototoxic (5%, 2.5%, 1%) (guinea pig) Photoallergy: Contact dermal photoallergic response was not induced Subchronic Oral Toxicity: Rat 90 day; 6-600 mg/kg; Essentially non-toxic Subchronic Dermal Toxicity: Rabbit 21 day; 20-200 mg/kg; No evidence of treatment related effects</p>
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EFFECTS OF OVEREXPOSURE

Based upon information available for this material and closely related materials, it is anticipated that this material will produce mild skin irritation and mild eye irritation upon direct contact, and inhalation may be harmful. Therefore, breathing dust, eye contact, prolonged or repeated skin contact should be avoided.

EyeIrritant	May cause mild eye irritation.
SkinIrritant	May cause sensitisation by skin contact. May cause mild skin irritation.
Carcinogen Category	0

12. ECOLOGICAL INFORMATION

Ecotoxicity	No Data Available
Persistence/Degradability	No Data Available
Mobility	Very soluble in water
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation Potential	No Data Available
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

ADG Code Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).

Air

IATA

Proper Shipping Name	Imidazolidinyl Urea
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land

Australia: ADG

Proper Shipping Name	Imidazolidinyl Urea
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	No Data Available

Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

New Zealand: NZS5433

Proper Shipping Name Imidazolidinyl Urea
Class No Data Available
Subsidiary Risk(s) No Data Available
EPG No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Sea

IMDG

Proper Shipping Name Imidazolidinyl Urea
Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available
EMS No Data Available
Marine Pollutant No

15. REGULATORY INFORMATION

General Information No Data Available

EPA (New Zealand)

Hazardous Substances and New Organisms Act (HSNO)
 Approval Code: HSR003843

Poisons Schedule (Aust) No Data Available

AICS Name Urea, N,N"-methylenebis[N'-[3-(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl]-

16. OTHER INFORMATION

Related Product Codes IMIURE1000, IMIURE1100
Revision 2
Revision Date 16-Sep-2010

Key/Legend
 < Less Than
 > Greater Than
AICS Australian Inventory of Chemical Substances
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres
CO₂ Carbon Dioxide
COD Chemical Oxygen Demand
deg C (°C) Degrees Celcius
EPA (New Zealand) Environmental Protection Authority of New Zealand
deg F (°F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH₂O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or **L** Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH₂O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Health and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
torr Millimetre of Mercury
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight