

Isocil™ RW

Version 1.0

MSDS Number: CO00003928

Revision Date: 2015.06.01

SECTION 1. IDENTIFICATION

Product name : Isocil™ RW
Product code : CO00003928

Manufacturer or supplier's details

Company : **Lonza Inc.**
90 Boroline Road
Allendale, NJ 07401
USA
Business Telephone 1-201-316-9200

Lonza Inc.
1200 Bluegrass Lakes Pkwy
Alpharetta, GA 30004
USA
Business Telephone 1-678-624-5800

E-mail address : prodinfo@lonza.com
Emergency telephone number : +41 61 313 94 94 (24h)

For US only CHEMTREC 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Biocides

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Acute toxicity (Dermal) : Category 3
Skin corrosion : Category 1B
Serious eye damage : Category 1
Skin sensitisation : Category 1

GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled

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H311 Toxic in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.

Precautionary statements

: **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
Hazardous components

Chemical Name	CAS-No.	Concentration (%)
5-Chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (mixture 3:1)	55965-84-9	14.20
Magnesium nitrate	10377-60-3	17.00
Magnesium chloride	7786-30-3	9.00
Acetic acid	64-19-7	< 0.30
Water	7732-18-5	60.00

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.

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- If breathing is irregular or stopped, administer artificial respiration.
Give oxygen.
First aider needs to protect himself.
Call a physician immediately.
- In case of skin contact : Take off all contaminated clothing immediately.
After contact with skin, wash immediately with plenty of soap and water.
Call a physician immediately.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.
- If swallowed : Call a physician immediately.
Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry powder
Water spray
Foam
- Specific hazards during firefighting : Heating or fire can release toxic gas.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use respirator when performing operations involving potential exposure to vapour of the product.
- Environmental precautions
- General advice : Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.
Provide sufficient air exchange and/or exhaust in work rooms.
- Conditions for safe storage : Keep container tightly closed.

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To maintain product quality, do not store in heat or direct sunlight.
Keep in a dry, cool and well-ventilated place.

Recommended storage temperature : 1 - 54 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Acetic acid	64-19-7	TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH
		STEL	15 ppm 37 mg/m ³	NIOSH/GUIDE
		REL	10 ppm 25 mg/m ³	NIOSH/GUIDE
		PEL	10 ppm 25 mg/m ³	OSHA_TRANS
		TWA	10 ppm 25 mg/m ³	Z1A
		STEL	15 ppm	CAD ON OEL
		TWA	10 ppm	CAD ON OEL

Appropriate engineering controls**Personal protective equipment**

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection
Material : Nitrile rubber
Rate of permeability : > 480 min
- Eye protection : Tightly fitting safety goggles
Face-shield
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Rubber or plastic apron
Rubber or plastic boots
- Hygiene measures : Wash hands before breaks and immediately after handling the product.
Avoid contact with skin, eyes and clothing.
Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : clear

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Colour	: amber
Odour	: stinging
Odour Threshold	: no data available
pH	: 1 - 3, (20 °C)
Melting point/range	: -33 °C
Boiling point/boiling range	: no data available
Flash point	: > 93 °C
Evaporation rate	: < 1
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	:
Relative density	: no data available
Density	: 1.3 g/cm ³ (25 °C)
Bulk density	: Not applicable
Solubility(ies) Water solubility	: completely soluble
Partition coefficient: n- octanol/water	: no data available
Auto-ignition temperature	: no data available
Decomposition temperature	: Hazardous decomposition products formed under fire conditions.
Viscosity Viscosity, dynamic	: ca. 16 mPa.s (25 °C)
Viscosity, kinematic	: no data available

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: Stable under normal conditions.
Conditions to avoid	: Temperatures above 130°F (stable for 6 months at 130°F). Strong sunlight for prolonged periods.
Incompatible materials	: Reducing agents Amines

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	: Bases Oxidizing agents
	: Mercaptans
Hazardous decomposition products	: Hydrogen chloride gas Nitrogen oxides (NOx) Carbon oxides Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Skin Eyes Ingestion Inhalation
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Acute toxicity

Acute oral toxicity (LD50)	: 457 mg/kg Species: Rat (male)
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Acute oral toxicity (LD50)	: 457 mg/kg Species: Rat
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Acute oral toxicity (LD50)	: 2,350 mg/kg Species: Rat
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Acute dermal toxicity (LD50)	: 660 mg/kg Species: Rabbit (male)
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Acute dermal toxicity (LD50)	: 4.5 - 79 mg/kg Species: Rabbit
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Acute dermal toxicity (LD50)	: 660 mg/kg Species: Rabbit
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Skin corrosion/irritation

Skin irritation	: Corrosive Species: Rabbit
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Serious eye damage/eye irritation

Eye irritation	: Corrosive Species: Rabbit Assessment: Risk of serious damage to eyes.
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Respiratory or skin sensitisation

Sensitisation	: Test Type: Buehler Test Species: Guinea pig Result: Sensitising
	: Species: Humans Result: not sensitizing

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Test Type: Photoallergy
Species: Humans
Result: not sensitizing

Species: Humans
Result: Sensitising

Further information

Remarks: Information given is based on data on the components and the toxicology of similar products.
No data is available on the product itself.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

Toxicity to terrestrial organisms : LD50(Colinus virginianus (Bobwhite quail)): 65.000 mg/kg
End point: Acute toxicity

LC50(Colinus virginianus (Bobwhite quail)): 3,536.000 ppm
Exposure time: 8 d
End point: Subacute toxicity

LC50(Anas platyrhynchos (Mallard duck)): 945.000 ppm
Exposure time: 8 d
End point: Subacute toxicity

EC50(Eastern oyster): 28.000 ppb
Exposure time: 48 h
End point: Acute toxicity

LC50(Anas platyrhynchos domestica (Peking duck)): > 530.000 ppm
Exposure time: 8 d
End point: Subacute toxicity

Persistence and degradability

no data available

Bioaccumulative potential**Components:****5-Chloro-2-methyl-2H-isothiazol-3-one**

Partition coefficient: n-
octanol/water : log Pow: 0.401

2-Methyl-2H-isothiazol-3-one

Partition coefficient: n-
octanol/water : log Pow: -0.486

Acetic acid

Partition coefficient: n-
octanol/water : log Pow: -0.2

Mobility in soil

no data available

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Other adverse effects

Additional ecological information : Information given is based on data on the components and the ecotoxicology of similar products.

The following ecotoxicological data refer to:

5-Chloro-2-methyl-2H-isothiazol-3-one and 2-Methyl-2H-isothiazol-3-one (mixture 3:1) (CAS-No.: 55965-84-9)

Ecotoxicity

- Toxicity to fish (LC50) : 0.19 mg/l
Species: Oncorhynchus mykiss (rainbow trout)
Acute toxicity
Exposure time: 96 h
- Toxicity to fish (LC50) : 0.28 mg/l
Species: Lepomis macrochirus (Bluegill sunfish)
Acute toxicity
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates (EC50) : 0.16 mg/l
Species: Daphnia magna (Water flea)
Immobilization
Exposure time: 48 h
- Toxicity to daphnia and other aquatic invertebrates (NOEL) : 0.035 mg/l
Species: Daphnia magna (Water flea)
Reproduction Test
Exposure time: 21 d
Method: OECD Test Guideline 202
- Toxicity to algae (ErC50) : 0.027 mg/l
Species: Selenastrum capricornutum (green algae)
Growth inhibition
Exposure time: 72 h
Test Type: Growth inhibition
- M-Factor (Acute aquatic toxicity) : 10
M-Factor (Chronic aquatic toxicity) : 1

Persistence and degradability

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

no data available

Mobility in soil

no data available

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Other adverse effects

no data available

Magnesium nitrate (CAS-No.: 10377-60-3)**Ecotoxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

Additional ecological information : There is no data available for this product.

Magnesium chloride (CAS-No.: 7786-30-3)**Ecotoxicity**

no data available

Persistence and degradability

Biodegradability : Remarks: Not applicable

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Dispose of in accordance with local regulations.
Material to be disposed of is classified as a D002 hazardous waste with a reportable quantity (RQ) of 100 lbs. of total isothiazolinone. For accidental release measures for each mixture refer to attached material safety data sheets.
- Contaminated packaging : CONTAINER DISPOSAL - METAL CONTAINERS: Neutralize residue in containers as noted in Section 6 of this MSDS ("Accidental Release Measures"). Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.
CONTAINER DISPOSAL - PLASTIC CONTAINERS: Neutralize residue in containers as noted in Section 6 of this MSDS ("Accidental Release Measures"). Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION**IATA**

- UN number** : 2922
Proper shipping name : Corrosive liquid, toxic, n.o.s.
(5-Chloro-2-methyl-4-isothiazolin-3-one)
Transport hazard class : 8
Packing group : II
Labels : 8 (6.1)
Environmental hazards : no

IMDG

- UN number** : 2922
Proper shipping name : Corrosive liquid, toxic, n.o.s.
(5-Chloro-2-methyl-4-isothiazolin-3-one)
Transport hazard class : 8
Packing group : II
Labels : 8 (6.1)
EmS Number 1 : F-A
EmS Number 2 : S-B
Environmental hazards : Marine pollutant: yes

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ADR

UN number : 2922
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.
(5-Chloro-2-methyl-4-isothiazolin-3-one)
Transport hazard class : 8
Packing group : II
Classification Code : CT1
Hazard Identification Number : 86
Labels : 8 (6.1)
Environmental hazards : yes

RID

UN number : 2922
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.
(5-Chloro-2-methyl-4-isothiazolin-3-one)
Transport hazard class : 8
Packing group : II
Classification Code : CT1
Hazard Identification Number : 86
Labels : 8 (6.1)
Environmental hazards : yes

DOT

UN number : 2922
Proper shipping name : Corrosive liquids, toxic, n.o.s.
(5-Chloro-2-methyl-4-isothiazolin-3-one)
Transport hazard class : 8
Packing group : II
Labels : 8 (6.1)
Emergency Response Guidebook : 154
Number
Environmental hazards : no

TDG

UN number : 2922
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.
(5-Chloro-2-methyl-4-isothiazolin-3-one)
Transport hazard class : 8
Packing group : II
Labels : 8 (6.1)
Environmental hazards : no

Special precautions for user : none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

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SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

Signal word

:

POISON



Hazard statements

:

Causes substantial but temporary eye injury.
 Fatal if absorbed through skin.
 Harmful if inhaled.
 Corrosive. Causes skin burns.
 Corrosive. Causes irreversible eye damage.
 This pesticide is toxic to fish.
 This pesticide is toxic to aquatic invertebrates.

EPCRA - Emergency Planning and Community Right-to-Know Act**SARA 311/312 Hazards**

: Acute Health Hazard

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations**Massachusetts Right To Know**

Magnesium nitrate	10377-60-3	
Acetic acid	64-19-7	- 0.3 %

Pennsylvania Right To Know

Magnesium nitrate	10377-60-3	
Acetic acid	64-19-7	- 0.3 %

New Jersey Right To Know

Magnesium nitrate	10377-60-3	
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California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Dimethylnitrosoamine	62-75-9	- 1 %
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The components of this product are reported in the following inventories:

- : This product can only be used commercially in the EPA registered application(s) noted on the product label.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.