

SAFETY DATA SHEET

1. Identification

Product identifier

RO CLEAN 5015

Other means of identification

Product code

RO CLEAN 5015

Recommended use

Membrane Cleaner

Recommended restrictions

For Industrial Use Only

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Nashville Chemical & Equipment Company

Address

7001 Westbelt Drive Nashville, TN 37209

United States

Telephone

1-615-350-7070

E-mail

info@nashchem.com

Emergency phone number

1-800-424-9300

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards

OSHA defined hazards

Not classified. Not classified.

Label elements



Signal word

Warning

Hazard statement

Causes skin imitation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statement

Prevention

Avoid breathing mist or vapor, Wash thoroughly after handling. Use only outdoors or in a

well-ventilated area. Wear protective gloves. Wear eye/face protection.

Response

If swallowed; Rinse mouth. Do NOT induce vomiting, If on skin; Wash with plenty of water, If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off

contaminated clothing and wash before reuse.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Material name: RO CLEAN 5015

RO CLEAN 5015 Version #: 01 Issue date: 05-31-2015

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medical advice/attention, Wash contaminated clothing before reuse. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and pers lingestion Rinse mouth. Get medicat attention if symptoms occur. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred aymptoms/effects, acute and delayed	Chemical name	Common name and synonyms	CAS number	%
A. First-aid measures			5329-14-6	15 - 20
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a PO CENTER or doctor/physician if you feel unwell, seep contact medical advice/attention. Wash contaminated clothing before reuse. Immediately flush eyes with plenty of soap and water. If skin irritation occurs: medical advice/attention. Wash contaminated clothing before reuse. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, it present and easy to do. Continue rinsing. Get medical attention if irritation develops and pers Rinse mouth. Get medical tatention if symptoms occur. Severe sye irritation. Symptoms may include stinging, tearing, radness, swelling, and blurred vision. May cause respiratory irritation. Skin fritation. May cause retheas and pain. Provide general supportive measures and treat symptomatically. Keep victim under observations may be delayed. From the chemical symptoms may be delayed. Self-contained pressures and treat symptomatically. Keep victim under observations may be delayed. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 5. Fire-flighting measures Suitable extingulahing media Junsuitable extingulahing	Other components below repor	table levels		> 80
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Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Liquid.

Color

Colorless.

Odor

Odorless.

Odor threshold

Not available.

ρН

1.0 estimated

Melting point/freezing point

Initial boiling point and boiling

Not available.

range

> 220 °F (> 104.44 °C)

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

Explosive limit - lower (%) Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Not available.

Vapor density

Not available.

Relative density Solubility(ies)

Not available.

Solubility (water)

Complete.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

Not available.

Decomposition temperature

Not available:

Viscosity

Not available.

Other information

Density

9.03 lbs/gal

Specific gravity

1.083

10. Stability and reactivity

Reactivity

Reacts violently with strong alkaline substances. This product may react with reducing agents.

Chemical stability

Possibility of hazardous

reactions

Material is stable under normal conditions. Hazardous polymerization does not occur.

Conditions to avoid

Incompatible materials

Do not mix with other chemicals. Contact with incompatible materials.

Hazardous decomposition

Bases. Reducing agents.

No hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation

May cause irritation to the respiratory system.

Skin contact

Causes skin irritation.

Eye contact Ingestion

Causes serious eye irritation.

Symptoms related to the physical, chemical and

Expected to be a low ingestion hazard.

toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation, May cause redness and pain.

Information on toxicological effects

Acute toxicity

May cause respiratory irritation.

Skin corrosion/irritation

Causes skin irritation,

Serious eye damage/eye

Causes serious eye irritation.

Irritation

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity

Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon

exposure to aquatic organisms and aquatic systems.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available. No data available.

Mobility in soil Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Material name: RO CLEAN 5015

Dispose in accordance with all applicable regulations.

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Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number

UN3265

UN proper shipping name

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (SULFAMIC ACID)

Transport hazard class(es) Class

Subsidiary risk

8

Packing group

Ш

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not requiated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

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SDS US

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Sulfamic acid (CAS 5329-14-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date

Version #

HMIS® ratings

05-31-2015

Health: 2 Flammability: 0 Physical hazard: 1 Personal protection: C

Disclaimer

Seller cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.