

Material Safety Data Sheet RI-77AA

OSHA Hazard Communication Standard: 29 CFR 1910-1200 Standard must be consulted for specific requirements.
 Note: Read Material Safety Data Sheets before using product.

1 PRODUCT INFORMATION

Identity: RI-77AA

Manufacturer's Name: **ROAN Industries, Inc.**
100 Chet Burleson Road
Bakersville, NC 28705

Emergency Telephone Number: CHEMTREC (800) 424-9300

Telephone Number for Information: (828) 688-5888 or (610) 759-4234 or (800) 804-4806

Date Revised: August 4, 2011

2 HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Common Name/Chemical Identity:	OSHA PEL	ACGIH TLV	OTHER LIMITS
A variable blend of the following ingredients:			
Acetic Acid 64-19-7	10ppm TWA	10ppm TWA	15ppm STEL
Ethylene Glycol 107-21-1	50ppm (ceiling)	100mg / m ³ (ceiling)	See Below
Diethylene Glycol 111-46-6	N.I.F.	N.I.F.	100mg / m ³ (8hr) AIHA WHEEL
Triethylene Glycol 112-27-6	N.I.F.	N.I.F.	N.I.F.
Tetraethylene Glycol 112-60-7	N.I.F.	N.I.F.	N.I.F.
Triethanolamine 102-71-6	N.I.F.	5 mg/m ³ TWA	N.I.F.
Diethanolamine 111-42-2	N.I.F.	2 mg/m ³ TWA	15mg/m ³ TWA (REL)
Highers from reaction of ethylene oxide and ammonia 68953-70-8	N.I.F.	N.I.F.	N.I.F.
N,N,N'-tris(2-hydroxyethyl) Ethylenediamine 060487-26-5	N.I.F.	N.I.F.	N.I.F.
Acetic anhydride 108-24-7	5ppm	5ppm TWA	N.I.F.
Water 7732-18-5	N.I.F.	N.I.F.	N.I.F.
Pentaethylene glycol 4792-15-8	N.I.F.	N.I.F.	N.I.F.
Hexaethylene glycol 2615-15-8	N.I.F.	N.I.F.	N.I.F.
Acetone 67-64-1	1000ppm	500ppm TWA	750ppm STEL
Ethanolamine distillation residues 68953-70-8	N.I.F.	N.I.F.	N.I.F.

Section 313 Supplier Notification: This product can contain up to the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

CAS#	Chemical Name	Max % by Weight
107-21-1	Ethylene Glycol	10%
111-42-2	Diethanolamine	5%

This information must be included in all MSDSs that are copied and distributed for this material.

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3 PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 100-165° C / 212-329° F **Specific Gravity (H₂O=1) At 25° C:** 1.11 - 1.16
Vapor Pressure: N.I.F. **Melting Point:** N.I.F.
Vapor Density: Over 1.0 **Evaporation Rate (Butyl Acetate=1):** N.I.F.
Solubility in Water: Miscible
Appearance and Odor: Dark amber liquid with characteristic odor.

4 FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Open Cup 160° C / 320° F COC **Flammable Limits: LEL:** N.I.F. **UEL:** N.I.F.
Extinguishing Media: Water spray, foam, dry chemical or carbon dioxide.

Special Fire Fighting Procedures:

- Fight fire from upwind position if possible.
- Use positive pressure breathing apparatus.
- Use complete protective clothing as needed.

Unusual Fire and Explosion Hazards:

- Some foaming can take place when fighting fire.
- Will burn under right conditions of heat and oxygen supply.
- Filled drums in the area of the fire should be kept cool by a water spray.

5 REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Strong oxidizers, excessive heat, sparks, or open fire.

Incompatibility: Strong oxidizers, acids, bases, nitrites, certain metals, and halogenated hydrocarbons.

Hazardous Decomposition or Byproducts: Oxides of carbon and nitrogen.

Hazardous Polymerization: Under normal conditions, will not occur.

6 HEALTH HAZARD DATA

Route of Entry:

Eyes, Skin, Inhalation, and Ingestion

Health Hazards:

Eyes: May cause severe irritation of eyes. May cause corneal injury.

Skin: Prolonged or repeated exposure may cause irritation, redness, and swelling.

Inhalation: High concentrations can cause nose, throat and lung irritation.

Ingestion: Can be toxic and affect the kidneys, liver, heart, nervous system, and reproductive system. Aspiration hazard if swallowed

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6 HEALTH HAZARD DATA (Continued)

May be fatal if swallowed.

May cause respiratory tract, eye, and skin irritation

Contains material that affects target organs - kidneys, liver, and central nervous system

Aspiration hazard if swallowed-can enter lungs and cause damage.

Contains material which can cause birth defects. Avoid exposure during pregnancy.

Carcinogenicity: NTP? N.I.F. **IARC Monographs?** N.I.F. **OSHA Regulated?** Yes

Emergency and First Aid Procedures:

Eyes: Flush with plenty of water for at least 15 minutes, occasionally holding upper and lower eyelids open. Contact a physician.

Skin: Flush with plenty of water. Remove contaminated clothing and wash skin with soap and water for several minutes. Contact a physician if irritation develops or persists.

Inhalation: Move person into fresh air. Get medical attention. Use artificial respiration and/or oxygen, if required. It may be dangerous to person providing aid to give mouth-to-mouth resuscitation.

Ingestion: Do not induce vomiting. Contact a physician.

Never give anything by mouth to an unconscious person.

In an emergency or if in doubt, contact a physician.

7 PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken in Case Material is Released or Spilled:

Never take any action if it involves personal risk or without adequate training. Evacuate surrounding area. Ventilate area. Wear personal protective clothing, equipment including appropriate respiratory protection. Contain the spill. Avoid eye and skin contact. Avoid breathing vapor. Use non-combustible absorbent materials; place absorbed spill into labeled airtight drums for proper disposal. Keep spill out of drains, sewers and waterways.

Waste Disposal Method: Dispose all waste in accordance with Federal, State and Local regulations. Dispose of waste via a licensed waste disposal contractor.

Precautions To Be Taken in Handling and Storing:

Eating, drinking, and smoking should be prohibited in areas where material is handled, stored, or processed.

Put on appropriate personal protective equipment. Avoid breathing of vapors and mist.

Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling.

Store in tightly closed, properly labeled containers in a cool, well-ventilated area.

Store away from incompatible materials. Launder contaminated clothing before re-use.

Use appropriate containment to avoid environmental contamination.

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8 CONTROL MEASURES

Ventilation

Local Exhaust: Use to maintain airborne concentrations below permissible levels.

Mechanical (General): Use in addition to local exhaust if required.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator that complies with an approved standard if a risk assessment necessitates one.

Protective Gloves: Use chemical resistant, impervious gloves complying with an approved standard if risk assessment necessitates use.

Eye Protection: Use safety eyewear complying with an approved standard if a risk assessment necessitates use.

Other Protective Clothing or Equipment: Other protective clothing or equipment should be used according to an approved standard after a risk assessment has been performed.

Work/Hygienic Practices: Wash hands and face thoroughly after handling and before eating. Remove contaminated clothing and laundry before reuse.

Engineering Controls: Emergency shower and eyewash facility should be in close proximity.

9 TRANSPORTATION INFORMATION

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Ethylene glycol)

UN/NA Number: UN 3082

Domestic Hazard Class: 9

Packing Group: III

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