

**SECTION 1: IDENTIFICATION****1.1. Product Identifier**

Product Form: Mixture

Product Name: nora® 355 B

**1.2. Intended Use of the Product****Use of the Substance/Mixture:** No use is specified.**1.3. Name, Address, and Telephone of the Responsible Party  
Company**

nora systems, Inc.

9 Northeastern Blvd

Salem, NH 03079

T 800-332-NORA

[www.nora.com/us](http://www.nora.com/us)**1.4. Emergency Telephone Number**

Emergency Number: 800-424-9300 CHEMTREC

**SECTION 2: HAZARDS IDENTIFICATION****2.1. Classification of the Substance or Mixture****Classification (GHS-US)**

Acute Tox. 4 (oral) H302

Acute Tox 4 (Inhalation: dust, mist) H332

Skin Corr. 1B H314

Eye Dam. 1 H318

Skin Sens. 1 H317

Muta. 2 H341

STOT RE 2 H373

Aquatic Chronic 2 H411

Full text of H-phrases: see section 16.

**2.2. Label Elements****GHS-US Labeling**

Hazard Pictograms (GHS-US):



GHS05



GHS07



GHS08



GHS09

Signal Word (GHS-US):

Danger

Hazard Statements (GHS-US):

H302+H332 - Harmful if swallowed or if inhaled.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H341 - Suspected of causing genetic defects.

H373 - May cause damage to organs through prolonged or repeated exposure.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US):

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

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P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

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 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other Hazards

May be corrosive to respiratory tract.

### 2.4. Unknown Acute Toxicity (GHS-US) Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Name	Product Identifier	% (w/w)
Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine	(CAS No) 68082-29-1	10 - 30
Phenol	(CAS No) 108-95-2	5 - 10
Propanol, oxybis-, dibenzoate	(CAS No) 27138-31-4	3 - 7
2,4,6-Tri(dimethylaminomethyl)phenol	(CAS No) 90-72-2	3 - 7
Triethylenetetramine	(CAS No) 112-24-3	1 - 5
Tetraethylenepentamine	(CAS No) 112-57-2	1 - 5
Diethylenetriamine	(CAS No) 111-40-0	1 - 5
Quartz*	(CAS No) 14808-60-7	0.1 – 1.0

\*This product contains a material that may be hazardous when present as an airborne dust. Since this product is in a liquid form, the material is not able to become airborne and cannot be inhaled. Thus, the hazards usually associated with this material are not applicable to this product.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Suspected of causing genetic defects. May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Inhalation: Harmful if inhaled. May be corrosive to the respiratory tract.

Skin Contact: Causes severe skin burns. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Eye Contact: Causes serious eye damage. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Ingestion: Harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Thermal decomposition generates corrosive vapors.

### 5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Ammonia.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. For further information refer to Section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in corrosive resistant container with a resistant inner liner.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

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### 7.3. Specific End Use(s) No use is specified

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	250 mppcf/%SiO <sub>2</sub> +5, 10mg/m <sup>3</sup> /%SiO <sub>2</sub> +2
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (respirable dust)
Alberta	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable particulate)
British Columbia	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable)
Manitoba	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
Nunavut	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable mass)
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable mass)
Ontario	OEL TWA (mg/m <sup>3</sup> )	0.10 mg/m <sup>3</sup> (designated substances regulation-respirable)
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
Québec	VEMP (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable dust)
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable fraction)
Yukon	OEL TWA (mg/m <sup>3</sup> )	300 particle/mL
Triethylenetetramine (112-24-3)		
Ontario	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Ontario	OEL TWA (ppm)	0.5 ppm
Phenol (108-95-2)		
USA ACGIH	ACGIH TWA (ppm)	5 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	5 ppm
USA OSHA	Limit value category (OSHA)	prevent or reduce skin absorption
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	60 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	15.6 ppm
USA IDLH	US IDLH (ppm)	250 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	5 ppm
British Columbia	OEL TWA (ppm)	5 ppm
Manitoba	OEL TWA (ppm)	5 ppm
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
New Brunswick	OEL TWA (ppm)	5 ppm
Newfoundland & Labrador	OEL TWA (ppm)	5 ppm

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Nova Scotia	OEL TWA (ppm)	5 ppm
Nunavut	OEL STEL (mg/m <sup>3</sup> )	38 mg/m <sup>3</sup>
Nunavut	OEL STEL (ppm)	10 ppm
Nunavut	OEL TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
Nunavut	OEL TWA (ppm)	5 ppm
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	38 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (ppm)	10 ppm
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (ppm)	5 ppm
Ontario	OEL TWA (ppm)	5 ppm
Prince Edward Island	OEL TWA (ppm)	5 ppm
Québec	VEMP (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
Québec	VEMP (ppm)	5 ppm
Saskatchewan	OEL STEL (ppm)	7.5 ppm
Saskatchewan	OEL TWA (ppm)	5 ppm
Yukon	OEL STEL (mg/m <sup>3</sup> )	38 mg/m <sup>3</sup>
Yukon	OEL STEL (ppm)	10 ppm
Yukon	OEL TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
Yukon	OEL TWA (ppm)	5 ppm
Diethylenetriamine (111-40-0)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	1 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	4.2 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	1 ppm
British Columbia	OEL TWA (ppm)	1 ppm
Manitoba	OEL TWA (ppm)	1 ppm
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	4.2 mg/m <sup>3</sup>
New Brunswick	OEL TWA (ppm)	1 ppm
Newfoundland & Labrador	OEL TWA (ppm)	1 ppm
Nova Scotia	OEL TWA (ppm)	1 ppm
Nunavut	OEL STEL (mg/m <sup>3</sup> )	13 mg/m <sup>3</sup>
Nunavut	OEL STEL (ppm)	3 ppm
Nunavut	OEL TWA (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>
Nunavut	OEL TWA (ppm)	1 ppm
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	13 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (ppm)	3 ppm
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (ppm)	1 ppm
Ontario	OEL TWA (ppm)	1 ppm
Prince Edward Island	OEL TWA (ppm)	1 ppm
Québec	VEMP (mg/m <sup>3</sup> )	4.2 mg/m <sup>3</sup>
Québec	VEMP (ppm)	1 ppm
Saskatchewan	OEL STEL (ppm)	2 ppm
Saskatchewan	OEL TWA (ppm)	1 ppm
Yukon	OEL STEL (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>

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Yukon	OEL STEL (ppm)	1 ppm
Yukon	OEL TWA (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>
Yukon	OEL TWA (ppm)	1 ppm

### 8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. Face shield.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Beige thick liquid
Odor:	Armine odor
Odor Threshold:	Not available
pH:	Not available
Evaporation Rate:	Not available
Melting Point:	Not available
Freezing Point:	Not available
Boiling Point:	350 °F (177 °C)
Flash Point:	> 200 °F (93 °C)
Auto-ignition Temperature:	Not available
Decomposition Temperature:	Not available
Flammability (solid, gas):	Not available
Lower Flammable Limit:	Not available
Upper Flammable Limit:	Not available
Vapor Pressure:	Not available
Relative Vapor Density at 20 °C:	Not available
Relative Density:	Not available
Specific Gravity:	1.3
Solubility:	Not available
Partition Coefficient: N-Octanol/Water:	Not available
Viscosity:	Approximately 30,000 cps
Explosion Data – Sensitivity to Mechanical Impact:	Not expected to present an explosion hazard due to mechanical impact.

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Explosion Data – Sensitivity to Static Discharge: Not expected to present an explosion hazard due to static discharge.

### SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity** Thermal decomposition generates corrosive vapors.

**10.2. Chemical Stability** Stable under recommended handling and storage conditions (see section 7).

**10.3. Possibility of Hazardous Reactions** Hazardous polymerization will not occur.

**10.4. Conditions to Avoid** Direct sunlight. Extremely high or low temperatures. Incompatible materials.

**10.5. Incompatible Materials** Strong acids. Strong bases. Strong oxidizers.

**10.6. Hazardous Decomposition Products** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Ammonia.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on Toxicological Effects - Product

Acute Toxicity: Oral - Harmful if swallowed. Inhalation - dust, mist - Harmful if inhaled.

LD50 and LC50 Data:

ATE US (oral)	1,203.53 mg/kg body weight
ATE US (dust, mist)	3.41 mg/l/4h

Skin Corrosion/Irritation: Causes skin burns and eye damage.

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Suspected of causing genetic defects.

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Harmful if inhaled. May be corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: Causes severe skin burns. Symptoms may include: Redness, pain, swelling, itching, burning, dryness and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure.

#### 11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Triethylenetetramine (112-24-3)	
LD50 Oral Rat	2500 mg/kg
LD50 Dermal Rabbit	550 mg/kg
Phenol (108-95-2)	

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LD50 Oral Rat	340 mg/kg
LD50 Dermal Rabbit	630 mg/kg
LC50 Inhalation Rat	0.316 mg/l/4h (reported as 316 mg/m <sup>3</sup> /4h)
ATE US (oral)	100.00 mg/kg body weight
ATE US (gases)	700.00 ppmV/4h
ATE US (vapors)	0.32 mg/l/4h
Diethylenetriamine (111-40-0)	
LD50 Oral Rat	1080 mg/kg
LD50 Dermal Rabbit	672 mg/kg
LC50 Inhalation Rat	0.3 mg/l/4h
ATE US (oral)	500.00 mg/kg body weight
ATE US (dermal)	1,100.00 mg/kg body weight
ATE US (gases)	4,500.00 ppmV/4h
ATE US (vapors)	11.00 mg/l/4h
ATE US (dust, mist)	1.50 mg/l/4h
2, 4, 6-Tri(dimethylaminomethyl)phenol (90-72-2)	
LD50 Oral Rat	1000 mg/kg
LD50 Dermal Rat	12800 mg/kg
ATE US (oral)	500.00 mg/kg body weight
ATE US (dermal)	1,100.00 mg/kg body weight
Tetraethylenepentamine (112-57-2)	
LD50 Oral Rat	2100 mg/kg
LD50 Dermal Rabbit	660 - 1260 mg/kg
Quartz (14808-60-7)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen List
Phenol (108-95-2)	
IARC Group	3
National Toxicology Program (NTP) Status	Twelfth Report – Items under consideration

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology – General: Toxic to aquatic life with long lasting effects.

Triethylenetetramine (112-24-3)	
LC50 Fish 1	570 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
EC50 Daphnia 1	31.1 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	495 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
Phenol (108-95-2)	
LC50 Fish 1	11.9 - 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	4.24 - 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	20.5 - 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	10.2 - 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Diethylenetriamine (111-40-0)	
LC50 Fish 1	248 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])



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EC50 Daphnia 1	16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	1014 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
Tetraethylenepentamine (112-57-2)	
LC50 Fish 1	420 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])
EC50 Daphnia 1	24.1 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and Degradability

Not available

### 12.3. Bioaccumulative Potential

Triethylenetetramine (112-24-3)	
BCF Fish 1	(no bioaccumulation expected)
Log Pow	-1.4
Phenol (108-95-2)	
BCF Fish 1	(no significant bioaccumulation)
Log Pow	1.47
Diethylenetriamine (111-40-0)	
BCF Fish 1	0.3 - 1.7
Log Pow	-1.3
Tetraethylenepentamine (112-57-2)	
BCF Fish 1	(no bioaccumulation expected)
Log Pow	< 1

### 12.4. Mobility in Soil

Not available

### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

Proper Shipping Name: CORROSIVE LIQUIDS, N.O.S. (Contains Phenol and 2,4,6-Tri (dimethylaminomethyl) phenol)  
Hazard Class: 8  
Identification Number: UN1760  
Label Codes: 8  
Packing Group: II  
Marine Pollutant: Marine pollutant  
ERG Number: 154



### 14.2. In Accordance with IMDG

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains Phenol and 2,4,6-Tri (dimethylaminomethyl) phenol)  
Hazard Class: 8  
Identification Number: UN1760  
Label Codes: 8  
Packing Group: II  
EmS-No. (Fire): F-A  
EmS-No. (Spillage): S-B  
Marine Pollutant: Marine pollutant



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### 14.3. In Accordance with IATA

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains Phenol and 2,4,6-Tri (dimethylaminomethyl) phenol)  
Hazard Class: 8  
Identification Number: UN1760  
Label Codes: 8  
Packing Group: II  
ERG Code (IATA): 8L



### 14.4. In Accordance with TDG

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains Phenol and 2,4,6-Tri (dimethylaminomethyl) phenol)  
Hazard Class: 8  
Identification Number: UN1760  
Label Codes: 8  
Packing Group: II  
Marine Pollutant (TDG): Marine pollutant



## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Phenol (108-95-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the United States SARA Section 302	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 302 Threshold Planning Quantity (TPQ)	≤ 10000
SARA Section 313 - Emission Reporting	1.0 %
Diethylenetriamine (111-40-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Propanol, oxybis-, dibenzoate (27138-31-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Tetraethylenepentamine (112-57-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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### 15.2. US State Regulations

Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Quartz (14808-60-7)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	
Triethylenetetramine (112-24-3)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	
Phenol (108-95-2)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List	
Diethylenetriamine (111-40-0)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	
Tetraethylenepentamine (112-57-2)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	

### 15.3. Canadian Regulations

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Quartz (14808-60-7)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E – Corrosive Material
Triethylenetetramine (112-24-3)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
WHMIS Classification	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material
Phenol (108-95-2)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	

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WHMIS Classification	Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class E - Corrosive Material Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Diethylenetriamine (111-40-0)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 0.1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material
2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material
Propanol, oxybis-, dibenzoate (27138-31-4)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Tetraethylenepentamine (112-57-2)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date:** 05/11/2015

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**Other Information:**

**GHS Full Text Phrases:**

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

#### Party Responsible for the Preparation of This Document

nora systems, Inc.

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS 2