



## Material Safety Data Sheet

### BRIQUEST 301-50A

Date Prepared: 8/25/06

Supersedes Date: 0/00/00

## 1. PRODUCT AND COMPANY DESCRIPTION

RHODIA INC.  
RHODIA NOVECARE  
CN7500  
8 Cedar Brook Drive  
Cranbury NJ 08512-7500

**Emergency Phone Numbers:**

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls) or Rhodia CAERS (Communication and Emergency Response System) at 800-916-3232.

**For Product Information:**

(888) 776-7337

**Chemical Name or Synonym:**

AMINO-TRI(METHYLENEPHOSPHONIC ACID)

**Molecular Formula:**

$C_3H_{12}NO_9P_3$

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	OSHA Hazard	Percentage
PHOSPHONIC ACID, {NITRILOTRIS(METHYLENE)}TRIS -	6419-19-8	Y	~ 40
PHOSPHONIC ACID, {(DIMETHYLAMINO)METHYLENE}BI S-	29712-30-9	Y	~ 5
PHOSPHOROUS ACID	10294-56-1	Y	< 4
PHOSPHORIC ACID	7664-38-2	Y	< 1.5
PHOSPHONIC ACID	13598-36-2	Y	< 1
HYDROCHLORIC ACID	7647-01-0	Y	< 1
WATER	7732-18-5	N	BALANCE

## 3. HAZARDS IDENTIFICATION

### A. EMERGENCY OVERVIEW:

**Physical Appearance and Odor:**

colorless to pale yellow / liquid, characteristic odor.

**Warning Statements:**

WARNING!! CAUSES EYE IRRITATION.

**B. POTENTIAL HEALTH EFFECTS:****Acute Eye:**

Irritant. May cause redness, irritation, tearing, pain.

**Acute Skin:**

Slightly irritating. May cause redness, inflammation.

**Acute Inhalation:**

May cause upper respiratory tract irritation, sore throat, coughing.

**Acute Ingestion:**

May cause nausea, irritation.

**Chronic Effects:**

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

## 4. FIRST AID MEASURES

**FIRST AID MEASURES FOR ACCIDENTAL:****Eye Exposure:**

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.

**Skin Exposure:**

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

**Inhalation:**

If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

**Ingestion:**

Wash out mouth with water and keep at rest. Seek immediate medical attention.

**MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:**

Skin contact may aggravate existing skin disease.

**NOTES TO PHYSICIAN:**

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically. No specific antidote available.

## 5. FIRE FIGHTING MEASURES

### FIRE HAZARD DATA:

**Flash Point:**

Not Applicable

**Extinguishing Media:**

Recommended: dry chemical, foam, water fog, carbon dioxide.

**Special Fire Fighting Procedures:**

Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full acid-resistant protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind; keep out of low areas.

**Unusual Fire and Explosion Hazards:**

Containers may explode (due to the build-up of pressure) when exposed to extreme heat.

**Hazardous Decomposition Materials (Under Fire Conditions):**

oxides of phosphorus

oxides of carbon

phosphine

## 6. ACCIDENTAL RELEASE MEASURES

**Evacuation Procedures and Safety:**

Ventilate closed spaces before entering. Personnel handling this material should be thoroughly trained to handle spills and releases. Wear appropriate protective gear for the situation. See Personal Protection information in Section 8. Evacuate and isolate spill area.

**Containment of Spill:**

Dike or retain dilution water or water from firefighting for later disposal. Collect and contain contaminated absorbent and dike material for disposal.

**Cleanup and Disposal of Spill:**

Neutralize spill area with soda ash, sodium bicarbonate or lime. Absorb neutralized spill with an inert absorbent. Shovel up into an appropriate closed container (see Section 7: Handling and Storage). DO NOT RETURN MATERIAL TO ITS ORIGINAL CONTAINER. Clean up residual material by washing area with water. Decontaminate tools and equipment following cleanup.

**Environmental and Regulatory Reporting:**

Do not flush to drain. Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

## 7. HANDLING AND STORAGE

**Minimum/Maximum Storage Temperatures:**

Not Available

**Handling:**

Do not get on skin or in eyes. Avoid breathing vapors and mists. Personnel handling this product should be thoroughly trained as to its hazards.

**Storage:**

Store in an area that is clean, diked, dry, well-ventilated, away from incompatible materials (see Section 10. Stability and Reactivity), Recommended container material: polyethylene.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Introductory Remarks:**

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

**Exposure Guidelines:**

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

**PHOSPHONIC ACID, {NITRILOTRIS(METHYLENE)}TRIS-**

	Notes	TWA	STEL
AIHA		10 mg/cu m	

**PHOSPHORIC ACID**

	Notes	TWA	STEL
ACGIH		1 mg/cu m	3 mg/cu m
OSHA		1 mg/cu m	3 mg/cu m

**HYDROCHLORIC ACID**

	Notes	TWA	STEL
ACGIH			2 ppm
OSHA	C	7 mg/cu m	
OSHA	C	5 ppm	

**Engineering Controls:**

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

**Respiratory Protection:**

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

**Eye/Face Protection:**

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

**Skin Protection:**

Skin contact must be prevented through the use of permeation resistant clothing, gloves and footwear, selected with regard for use conditions and exposure potential. An emergency shower must be readily accessible to the work area. Consideration must be given both to durability as well as permeation resistance.

**Work Practice Controls:**

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

**Physical Appearance:**

colorless to pale yellow / liquid.

**Odor:**

characteristic odor.

**pH:**

< 2.5 at 1 wt/wt%.

**Specific Gravity:**

Not Available

**Density:**

1.325 to 1.34 g/ml at 20 C (68 F).

**Water Solubility:**

miscible 100 wt/wt% at 20 C (68 F).

**Melting Point Range:**

Not Available

**Freezing Point Range:**

~ -10 C (14 F)

**Boiling Point Range:**

108 C (226 F) at 760 mmHg

**Vapor Pressure:**

Not Available

**Vapor Density:**

Not Available

**Viscosity:**

viscosity (centipoises) : 70 cps at 20 C (68 F).

**Octanol/Water Partition Coefficient:**

< 0.001

**Molecular Weight:**

299

## 10. STABILITY AND REACTIVITY

**Chemical Stability:**

This material is stable under normal handling and storage conditions described in Section 7.

**Conditions To Be Avoided:**

heat

temperatures greater than 200 C (392 F)

**Materials/Chemicals To Be Avoided:**

strong oxidizing agents

bases

**Decomposition Temperature Range:**

> 200 C (392 F)

**The Following Hazardous Decomposition Products Might Be Expected:**

**Decomposition Type: thermal**

oxides of phosphorus

oxides of carbon

Acids of phosphorus

phosphine

**Hazardous Polymerization Will Not Occur.**

**Avoid The Following To Inhibit Hazardous Polymerization:**

not applicable

## 11. TOXICOLOGICAL INFORMATION

**Acute Eye Irritation:**

**Toxicological Information and Interpretation:**

eye - eye irritation, \*\*. May cause significant irritation to the eyes.

**Acute Skin Irritation:**

**Toxicological Information and Interpretation:**

skin - skin irritation, rabbit. Mildly irritating.

**Acute Dermal Toxicity:**

**Toxicological Information and Interpretation:**

LD50 - lethal dose 50% of test species, > 6310 mg/kg, rabbit. Data for active ingredient.

**Acute Respiratory Irritation:**

No test data found for product.

**Acute Inhalation Toxicity:**

No test data found for product.

**Acute Oral Toxicity:****Toxicological Information and Interpretation:**

LD50 - lethal dose 50% of test species, 2910 mg/kg, rat. Data for active ingredient.

**Chronic Toxicity:**

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

Toxicological Information and Interpretation - MUTAGENICITY, \*\*. Ames Test: Negative. Mouse Lymphoma Negative. - REPRODUCTIVE TOXICITY, \*\*. Material is not a reproductive toxin. Fed to rats at 300, 1000, and 3000 ppm for three generations. - TERATOGENICITY, \*\*. Reported not to be a teratogen.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological Information:****Ecotoxicological Information and Interpretation:**

EC50 - effective concentration 50% of test species, 297 mg/l/48 hr, Daphnia magna.

NOEC - no effect concentration, 125 mg/l/48 hr, Daphnia magna.

NOEC - no effect concentration, 330 mg/l/96 hr, rainbow trout (Oncorhynchus mykiss).

EC50 - effective concentration 50% of test species, 12.4 mg/l/96 hr, algae.

**Chemical Fate Information:**

Product is not expected to bioaccumulate. Not readily biodegradable.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:**

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

**EPA Hazardous Waste - YES**

## 14. TRANSPORTATION INFORMATION

**Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification.**

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

**US Department of Transportation**

Hazard Class..... 8

Shipping Name:

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical Shipping Name:

ACIDIC PHOSPHONATE SOLUTION

ID Number..... UN3265

Packing Group.... III

Labels..... CORROSIVE

Emergency Guide #.... 153

**15. REGULATORY INFORMATION****Inventory Status**

<b>Inventory</b>	<b>Status</b>
UNITED STATES (TSCA)	Y
CANADA (DSL)	N
EUROPE (EINECS/ELINCS)	Y
AUSTRALIA (AICS)	N
JAPAN (MITI)	N
SOUTH KOREA (KECL)	N

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

**FEDERAL REGULATIONS****Inventory Issues:**

All functional components of this product are listed on the TSCA Inventory.

**SARA Title III Hazard Classes:**

Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

**SARA Extremely Hazardous Substances (EHS)/CERCLA Hazardous Substances**

<b>Ingredient</b>	<b>CERCLA/SARA RQ</b>	<b>SARA EHS TPQ</b>
PHOSPHORIC ACID	5000 lbs	
HYDROCHLORIC ACID	5000 lbs	500 lbs

**STATE REGULATIONS:**

This product contains the following components that are regulated under California Proposition 65:

<b>Ingredient Name</b>	<b>Cancer List</b>	<b>Reprod. List</b>	<b>No Sign. Risk Lvl (ug/day) California</b>	<b>RPI</b>
FORMALDEHYDE	Y	N	40	ND



## 16. OTHER INFORMATION

### National Fire Protection Association Hazard Ratings--NFPA(R):

- 2 Health Hazard Rating--Moderate
- 1 Flammability Rating--Slight
- 1 Instability Rating--Slight

### National Paint & Coating Hazardous Materials Identification System--HMIS(R):

- 2 Health Hazard Rating--Moderate
- 1 Flammability Rating--Slight
- 1 Reactivity Rating--Slight

### Reason for Revisions:

New product MSDS.

### Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

ND - Not determined

RHODIA - Rhodia Established Exposure Limits

### Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

**\*\* End of MSDS Document \*\***