



## Material Safety Data Sheet

RHODAFAC RS-610

Date Prepared: 12/04/09

Supersedes Date: 4/09/09

### 1. PRODUCT AND COMPANY IDENTIFICATION

RHODIA INC.  
RHODIA NOVECARE  
CN 7500  
8 Cedar Brook Drive  
Cranbury, NJ 08512-7500 US

**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:**

800-973-7873

**Chemical Name or Synonym:**

COMPLEX ORGANIC PHOSPHATE ESTER, FREE ACID

### 2. HAZARDS IDENTIFICATION

#### A. EMERGENCY OVERVIEW:

**Physical Appearance and Odor:**  
cloudy viscous liquid, slight odor.

**Warning Statements:**

WARNING!! SEVERE EYE IRRITANT. SKIN IRRITANT. RISK OF SERIOUS DAMAGE TO EYES.

#### B. POTENTIAL HEALTH EFFECTS:

**Acute Eye:**

Severe irritant. Can cause redness, irritation, tearing, pain, May cause significant eye damage.

**Acute Skin:**

Low acute dermal toxicity. Irritant. Can cause redness, inflammation, irritation.

**Acute Inhalation:**

Inhalation not likely. Mists may cause upper respiratory tract irritation.

**Acute Ingestion:**

Low acute oral toxicity. May cause irritation, nausea, vomiting, abdominal cramps.

**Chronic Effects:**

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS Reg Number	OSHA Hazard	% WT/WT
POLYOXYETHYLENE TRIDECYL ETHER PHOSPHATE	9046-01-9	Y	> 87.2
ALCOHOL ETHOXYLATE	78330-21-9	Y	< 10
PHOSPHORIC ACID	7664-38-2	Y	< 2
WATER	7732-18-5	N	< 1

**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 medical attention.

**Skin Exposure:**

In case of contact, immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned.

**Inhalation:**

Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

**Ingestion:**

Do not induce vomiting, unless directed to do so by a physician. If victim is conscious and alert, wash out mouth with water and keep at rest. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side. Seek 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:

235 C (455 F). Flammability Class: WILL BURN.

#### Method Used:

Closed cup

#### Flammability Limits (vol/vol%):

Lower:

No Data

Upper:

No Data

#### Extinguishing Media:

Recommended (small fires): dry chemical, carbon dioxide, Recommended (large fire): alcohol foam, universal foam, water spray, Not recommended: water jet (frothing possible).

#### Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

#### Unusual Fire and Explosion Hazards:

Product will burn under fire conditions.

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

oxides of phosphorus

oxides of carbon

## 6. ACCIDENTAL RELEASE MEASURES

### Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

### Containment of Spill:

Follow procedure described below under Cleanup and Disposal of Spill.

### Cleanup and Disposal of Spill:

Absorb with an inert absorbent. Sweep up and place in an appropriate closed container (see Section 7: Handling and Storage). Clean up residual material by washing area with water. Collect washings for disposal.

**Environmental and Regulatory Reporting:**

Do not flush to drain. 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:**

Avoid breathing vapors and mists. Avoid direct or prolonged contact with skin and eyes.

Ethylene oxide may collect in container head space. Although concentrations are expected to remain below established exposure limits, provide adequate ventilation when accessing or working with open containers and tanks.

**Storage:**

Store in tightly closed containers. Store in properly designed containers. Store in an area that is dry, well-ventilated, away from ignition sources, away from incompatible materials (see Section 10. Stability and Reactivity), Container material to avoid: unprotected metal.

**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:

PHOSPHORIC ACID

---

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

**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: general area dilution/exhaust ventilation.

**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.

For reasonably foreseeable industrial end uses of this material, respiratory protection should not be necessary.

**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 should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). 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:**

---

cloudy viscous liquid.

Odor:  
slight odor.

pH:  
< 1.5 at 10 wt/wt%.

Specific Gravity:  
1.03 at 25 C (77 F).

Water Solubility:  
dispersible

Melting Point Range:  
Not Available

Boiling Point Range:  
Not Available

Vapor Pressure:  
Not Available

Vapor Density:  
Not Available

Octanol/Water Partition Coefficient:  
Not Available

## 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  
open flame  
spark

Materials/Chemicals To Be Avoided:  
strong bases  
strong oxidizing agents  
strong reducing agents

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal  
oxides of phosphorus  
oxides of carbon

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, rabbit.  
Severely irritating.

### Acute Skin Irritation:

The following data is for similar or related products.

Toxicological Information and Interpretation  
skin - skin irritation, rabbit.  
Irritating.

### Acute Dermal Toxicity:

No test data found for product.

### Acute Respiratory Irritation:

No test data found for product.

### Acute Inhalation Toxicity:

No test data found for product.

### Acute Oral Toxicity:

The following data is for similar or related products.

Toxicological Information and Interpretation  
LD50 - lethal dose 50% of test species, > 2000 mg/kg, rat.

### 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.

No additional test data found for product.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicological Information:

Ecotoxicological Information and Interpretation:  
LC50 - lethal concentration 50% of test species, 10 mg/l/96 hr, fish:  
Brachydanio rerio (Zebrafish).

### Chemical Fate Information:

Ultimately 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.

**Container Handling and Disposal:**

Any containers or equipment used should be decontaminated immediately after use.

EPA Hazardous Waste - YES

**EPA RCRA HAZARDOUS WASTE CODES:**

"C" Corrosive.

**14. TRANSPORT INFORMATION**

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

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

**US DOT:**

Hazard Class..... 9

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Shipping Name: (CONTAINS POLYOXYETHYLENE TRIDECYL ETHER PHOSPHATES)

ID Number..... UN3082

Packing Group.... III

Emergency Guide #.... 171

DOT Marine Pollutant

**TDG:**

Hazard Class..... 9

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Shipping Name: (CONTAINS POLYOXYETHYLENE TRIDECYL ETHER PHOSPHATES)

ID Number..... UN3082

Packing Group.... III

**IMO:**

Hazard Class..... 9

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Shipping Name: (CONTAINS POLYOXYETHYLENE TRIDECYL ETHER PHOSPHATES)

ID Number..... UN3082

Packing Group.... III

IMO Marine Pollutant



## IATA:

Hazard Class..... 9

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Shipping Name: (CONTAINS POLYOXYETHYLENE TRIDECYL ETHER PHOSPHATES)

ID Number..... UN3082

Packing Group.... III

**15. REGULATORY INFORMATION**

## Inventory Status

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

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. For TSCA Inventory purposes, this material may be described as: Poly(oxy-1,2-ethanediyl), .alpha.-hydroxy-.omega.-hydroxy-, mono-C11-14-isoalkyl ethers, C13-rich, phosphates (CAS# 78330-24-2).

## 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

Ingredient	CERCLA/SARA RQ	SARA EHS TPQ
PHOSPHORIC ACID	5000 lbs	

## STATE REGULATIONS:

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

Ingredient Name	Cancer	Reprod.	No Sign.	Risk Lvl (ug/day)
-----------------	--------	---------	----------	-------------------

## RHODAFAC RS-610

	List	List	California	RHODIA
DIOXANE	Y	N	30	ND
ETHYLENE OXIDE	Y	Y	2	ND
ACETALDEHYDE	Y	N	90	ND

## 16. OTHER INFORMATION

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

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

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

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

## Reason for Revisions:

Change and/or addition made to Section 14.

## 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\*\***