Material Safety Data Sheet

RHODAFAC ASI-80

Date Prepared: 9/17/08 **Supersedes Date: 3/16/06**

1. PRODUCT AND COMPANY IDENTIFICATION

RHODIA INC.
RHODIA NOVECARE
CN 7500
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:
(800) 973-7873

Chemical Name or Synonym:
PHOSPHONIC ACID, OCTYL-

Molecular Formula:
$C_8H_{19}O_3P$

2. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:
colorless to pale yellow / liquid, characteristic odor.

Warning Statements:
DANGER! CORROSIVE. CAUSES BURNS. SEVERE EYE, SKIN AND RESPIRATORY TRACT IRRITANT. RISK OF SERIOUS DAMAGE TO EYES. CORROSIVE TO METALS. COMBUSTIBLE LIQUID.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye:
Corrosive. Causes redness, burns, tissue destruction, permanent damage to the cornea.

Acute Skin:
Severe irritant. Can cause redness, inflammation, rash.

Acute Inhalation:

Harmful if inhaled. Can cause significant respiratory tract irritation, shortness of breath, coughing, a burning sensation.

Acute Ingestion:
Low acute oral toxicity. Can cause burns to mouth and esophagus, corrosion, nausea, vomiting, irritation, May produce symptoms similar to those from inhalation.

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
PHOSPHONIC ACID, OCTYL-	4724-48-5	Y	~ 80
ETHANOL	64-17-5	Y	~ 10

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, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.

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:
Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek immediate medical attention.

Ingestion:
Wash out mouth with water and keep at rest. Seek immediate medical attention. NEVER attempt to induce vomiting. Consult a doctor if necessary.

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:
~ 46 C (114 F). Flammability Class: FLAMMABLE.

Method Used:
Pensky-Martens Closed Cup

Flammability Limits (vol/vol%):	Lower:	Upper:
	3.3	19

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:
Product will burn under fire conditions. Containers may explode (due to the build-up of pressure) when exposed to extreme heat. Hydrogen gas, which is flammable and can form explosive mixtures with air, may be released on contact with many metals. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail. This product has a flash point as indicated above. However it does not sustain combustion as determined by a test method specified in 49 CFR 173 - Appendix H to Part 173 Method for Sustained Combustibility. Storage practices should be in accordance with local fire code requirements.

Hazardous Decomposition Materials (Under Fire Conditions):
oxides of phosphorus
oxides of carbon

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:
Absorb neutralized spill with an inert absorbent. DO NOT RETURN MATERIAL TO ITS ORIGINAL CONTAINER. Decontaminate tools and equipment following cleanup. Carefully neutralize spill with a calcium carbonate or calcium hydroxide solution. Shovel up into an appropriate closed container (see Section 7: Handling and Storage). Clean up residual material by washing area with a 3% solution of sodium bicarbonate. Use non-sparking tools.

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. Avoid direct or prolonged contact with skin and eyes. Keep containers closed when not being used. Use only acid resistant equipment. Use nonsparking tools and grounded/bonded equipment and containers when transferring.

Storage:
Store in tightly closed containers. Store in an area that is clean, cool, dry, well-ventilated, bases, oxidizers, reducing agents, Ensure that there is a suitable retention system within the storage area. The floor in the storage area should be impermeable. Container material to avoid: metal, aluminum (hydrogen gas may be released), Store away from; away from incompatible materials (see Section 10. Stability and Reactivity).

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:

ETHANOL

	Notes	TWA	STEL
ACGIH		1000 ppm	
OSHA		1000 ppm	
OSHA		1900 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, local exhaust ventilation at the point of generation.

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. Face contact should be prevented through use of a face shield.

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:
2.3 at 5 wt/wt%.

Specific Gravity:
1.01 at 20 C (68 F).

Density:
1.01 g/ml at 20 C (68 F).

Water Solubility:
dispersible

Melting Point Range:
Not Available

Freezing Point Range:
10 C (50 F)

Boiling Point Range:
> 390 C (734 F) at 760 mmHg

Vapor Pressure:
Not Available

Vapor Density:
Not Available

Viscosity:
viscosity (milliPascals seconds) : 85 mPa.s at 25 C (77 F).

Molecular Weight:
194

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
hot surfaces
open flame
spark
static electricity
ignition sources

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

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal
oxides of phosphorus
oxides of carbon
Acids of phosphorus

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, **. Corrosive. This material is expected to cause significant irritation to the eyes.

Acute Skin Irritation:

Toxicological Information and Interpretation:

skin - skin irritation, **. Severely irritating. Corrosive. This material is expected to cause significant irritation to the skin.

Acute Dermal Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, > 2000 mg/kg, rabbit. Extrapolated value based on data for a similar product.

Acute Respiratory Irritation:

Toxicological Information and Interpretation:

lung - lung irritation (qualitative), **. Severely irritating. Corrosive. This material is expected to cause significant irritation to the respiratory tract.

Acute Inhalation Toxicity:

No test data found for product.

Acute Oral Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, > 2000 mg/kg, rat. Extrapolated value based on data for a similar product, Severely irritating. Corrosive.

Chronic Toxicity:

This product contains the substances that are considered to be "probable" or "suspected" human carcinogens as follows:

	Regulatory Agency Listing Carcinogen			
Ingredient Name	**OSHA**	**IARC**	**NTP**	**ACGIH**
ETHANOL	No	1	No	No

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

May cause adverse environmental impact if material reaches waterways. The following data is for similar or related products.

Ecotoxological Information and Interpretation:

EC50 - effective concentration 50% of test species, 5.3 mg/l/48 hr, Daphnia.

Chemical Fate Information:

The following data is for similar or related product. Degradability: 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. 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.

This product does not sustain combustion as determined by a test method specified in 49 CFR 173 - Appendix H to Part 173 Method for Sustained Combustibility.

US DOT:
Hazard Class..... 8
Shipping Name:
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Shipping Name:
(CONTAINS OCTYL PHOSPHONIC ACID)
ID Number..... UN3265
Packing Group.... III
Labels..... CORROSIVE
Emergency Guide #.... 153

TDG:
Hazard Class..... 8
Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Shipping Name: (CONTAINS OCTYL PHOSPHONIC ACID)
ID Number..... UN3265
Packing Group.... III

IMO:
Hazard Class..... 8
Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Shipping Name: (CONTAINS OCTYL PHOSPHONIC ACID)
ID Number..... UN3265
Packing Group.... III

IATA:
Hazard Class..... 8
Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Shipping Name: (CONTAINS OCTYL PHOSPHONIC ACID)
ID Number..... UN3265
Packing Group.... III

15. REGULATORY INFORMATION

Inventory Status

Inventory	Status
UNITED STATES (TSCA)	Y

CANADA (DSL)	N
EUROPE (EINECS/ELINCS)	Y
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:
SARA Title III Hazard Classes: Fire Hazard - YES Reactive Hazard - NO Release of Pressure - NO Acute Health Hazard - YES Chronic Health Hazard - NO

SARA Title III Hazard Classes:

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

STATE REGULATIONS:
This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION

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

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

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

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

Reason for Revisions:
Change and/or addition made to Warning Statements in Section 3, Section 5, Section 6, Section 10.

Key Legend Information:
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
TLV - Threshold Limit Value
PEL - Permissable 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 ****