



# Furaglas Catalyst

## SECTION 1. IDENTIFICATION

**Product Identifier** Furaglas Catalyst  
**Other Means of Identification** none  
**Product Family** Organic Acid Mixture  
**Recommended Use** Catalyst used to solidify Stebbins AR-20-QC resin.  
**Restrictions on Use** None known.  
**Manufacturer/Supplier Identifier** The Stebbins Engineering and Manufacturing Company, 363 Eastern Boulevard, Watertown, NY, 13601, (315) 782-3000, www.stebbinseng.com  
**Emergency Phone No.** Chemtrec - Within North America, 1-800-424-9300, 24 hours  
Stebbins 24 Hour Contact-, 1-315-788-6624  
**SDS No.** 092

## SECTION 2. HAZARD IDENTIFICATION

### Classification

Corrosive to metals - Category 1; Skin corrosion - Category 1; Serious eye damage - Category 1

### Label Elements



Signal Word:  
Danger

### Hazard Statement(s):

H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H290 May be corrosive to metals.

### Precautionary Statement(s):

#### Prevention:

P260 Do not breathe dusts or mists.  
P264 Wash hands and skin thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Response:

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 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.

P310 Immediately call a POISON CENTRE or doctor.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

Water-reactive.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Triethyl phosphate	78-40-0	70 - 80%	N/A	Ethyl phosphate
Phosphoric acid solutions	7664-38-2	20 - 30%	N/A	Orthophosphoric acid

#### Notes

\*\*This ingredient is a component of the complex mixture.

Concentrations are expressed in % weight/weight.

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Get medical advice or attention if you feel unwell or are concerned.

##### Skin Contact

Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Get medical advice or attention if you feel unwell or are concerned.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

##### Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Get medical advice or attention if you feel unwell or are concerned. Rinse mouth with water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Give large quantities of water to drink.

##### First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

#### Most Important Symptoms and Effects, Acute and Delayed

If on skin: causes moderate to severe irritation. May burn the skin. Permanent scarring may result. Repeated or

Product Identifier: Furaglas Catalyst - Ver. 4

SDS No.: 092

Date of Preparation: September 23, 2016

Date of Last Revision: June 30, 2023

Page 02 of 08

prolonged exposure can irritate or burn the skin.

If in eyes: may cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result. The vapour also irritates the eyes.

#### **Immediate Medical Attention and Special Treatment**

##### **Target Organs**

Eyes, skin, respiratory system.

##### **Special Instructions**

Not applicable.

##### **Medical Conditions Aggravated by Exposure**

None known.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Not combustible. Use extinguishing agent suitable for surrounding fire.

### **Specific Hazards Arising from the Product**

Contact with water causes violent frothing and spattering.

In a fire, the following hazardous materials may be generated: flammable hydrogen; corrosive hydrogen chloride.

### **Special Protective Equipment and Precautions for Fire-fighters**

Do NOT apply water directly to spill. Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

### **Environmental Precautions**

It is good practice to prevent releases into the environment.

### **Methods and Materials for Containment and Cleaning Up**

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Do not direct water at spill or source. Store recovered product in suitable containers that are: tightly-covered, corrosion-resistant.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Wear personal protective equipment to avoid direct contact with this chemical. Never add water to a corrosive. Always add corrosives slowly to COLD water. Immediately remove any clothing which becomes wet or heavily contaminated. Launder clothes before re-wearing. Inform laundry personnel of product hazard(s). Do not take contaminated clothing home. Properly dispose of any contaminated items, including shoes, that cannot be decontaminated. DO NOT re-use.

### **Conditions for Safe Storage**

Store in an area that is: well-ventilated, secure and separate from work areas, separate from incompatible materials (see Section 10: Stability and Reactivity).

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Product Identifier: Furaglas Catalyst - Ver. 4

SDS No.: 092

Date of Preparation: September 23, 2016

Date of Last Revision: June 30, 2023

Page 03 of 08

## Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Phosphoric acid solutions	1 mg/m3	3 mg/m3	1 mg/m3	3 mg/m3		

### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Clear liquid. Particle Size: Not applicable
Odour	Acidic
Odour Threshold	Not available
pH	0.5
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Boiling Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable (liquid).
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.2
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
Physical State	Liquid
Molecular Formula	Not available
Molecular Weight	Not available
Bulk Density	74.9 lb/ft3 (1200.0 kg/m3)
Surface Tension	Not available
Critical Temperature	Not available
Electrical Conductivity	Not available
Saturated Vapour Concentration	Not available

Product Identifier: Furaglas Catalyst - Ver. 4  
Date of Preparation: September 23, 2016  
Date of Last Revision: June 30, 2023

SDS No.: 092

Page 04 of 08

## SECTION 10. STABILITY AND REACTIVITY

### Chemical Stability

Unstable under certain conditions - see Conditions to Avoid.

### Possibility of Hazardous Reactions

Reacts in the presence of water, alkaline conditions (high pH). Releases a large amount of heat.

### Conditions to Avoid

Alkaline conditions (high pH). Water, moisture or humidity.

### Incompatible Materials

Releases excessive heat on contact with: water, strong bases (e.g. sodium hydroxide). Forms flammable chemicals on contact with: metals (e.g. aluminum).

### Hazardous Decomposition Products

Corrosive hydrogen chloride; flammable hydrogen gas.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Skin contact; eye contact; inhalation.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Triethyl phosphate	> 8817 mg/m <sup>3</sup> (rat) (4-hour exposure)	1600 mg/kg (rabbit)	> 2000 mg/kg (rabbit)
Phosphoric acid solutions	213 mg/m <sup>3</sup> (rat) (4-hour exposure)	3500 mg/kg (rat)	1260 mg/kg (rabbit)
p-Toluenesulfonic acid		2570 mg/kg (rat)	

### Skin Corrosion/Irritation

Human experience and animal tests show skin corrosion. Contact can cause pain, redness, burns, and blistering. Permanent scarring can result.

### Serious Eye Damage/Irritation

Human experience and animal tests show serious eye damage. Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result. The vapour also irritates the eyes.

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May cause nose and throat irritation.

#### Skin Absorption

No information was located.

#### Ingestion

Causes damage to organs based on information for closely related materials.

### Aspiration Hazard

Not known to be an aspiration hazard.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause irritation of the respiratory system. May cause respiratory tract injury, effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above.

### Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

### Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Product Identifier: Furaglas Catalyst - Ver. 4

SDS No.: 092

Date of Preparation: September 23, 2016

Date of Last Revision: June 30, 2023

Page 05 of 08

ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists.

IARC = International Agency for Research on Cancer.

NTP = National Toxicology Program.

OSHA = US Occupational Safety and Health Administration.

**Reproductive Toxicity**

**Development of Offspring**

Not known to harm the unborn child.

**Sexual Function and Fertility**

Not known to cause effects on sexual function or fertility.

**Effects on or via Lactation**

Not known to cause effects on or via lactation.

**Germ Cell Mutagenicity**

Not known to be a mutagen.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Not harmful to fish, crustacea, based on acute toxicity tests. Not harmful to crustacea, based on chronic toxicity tests.

**Acute Aquatic Toxicity**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Triethyl phosphate	> 100 mg/L (Pimephales promelas (fathead minnow); 96-hour)	350 mg/L (Daphnia magna (water flea); 48-hour)		
Phosphoric acid solutions	3.5pH-3.0pH (Lepomis macrochirus (bluegill); 96-hour; static)			

**Chronic Aquatic Toxicity**

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Triethyl phosphate				729 mg/L (21-day)

**Persistence and Degradability**

No ingredient of this product or its degradation products is known to be highly persistent.

**Bioaccumulative Potential**

This product and its degradation products are not known to bioaccumulate.

**Mobility in Soil**

Studies are not available.

## Other Adverse Effects

There is no information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Treat waste in an approved waste disposal facility. Empty containers retain product residue. Follow label warnings even if container appears to be empty.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN1760	Corrosive liquid, n.o.s. (Organic Acids)	8	II
IMO (Marine)	UN1760	Corrosive liquid, n.o.s. (Organic Acids)	8	II
IATA (Air)	UN1760	Corrosive liquid, n.o.s. (Organic Acids)	8	II
Canadian TDG	UN1760	Corrosive liquid, n.o.s. (Organic Acids)	8	II

**Special Precautions** Please note: Reportable Quantity: (5,000 lb.(2,268 kg.))

### Transport in Bulk according to International Maritime Organization Instruments

Not applicable

**Emergency Response** 154  
**Guide No.**

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

HMIS classifications:

Health 3 \*

Fire Hazard 2

Reactivity Hazard 0

0 = not significant, 1 =Slight,

2 = Moderate, 3 = High

4 = Extreme, \* = Chronic.

### Canada

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

#### CEPA - National Pollutant Release Inventory (NPRI)

Not specifically listed.

### USA

#### Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are exempt from TSCA Inventory requirements.

#### Additional USA Regulatory Lists

US Federal

CERCLA:

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA, 40 CFR 302). RQ: 5000 lb. (Triethyl phosphate). (Phosphoric acid solutions)

Product Identifier: Furaglas Catalyst - Ver. 4

SDS No.: 092

Date of Preparation: September 23, 2016

Date of Last Revision: June 30, 2023

Page 07 of 08

SARA Title III - Section 302:  
Acute Health Hazard Chronic Health Hazard Fire Hazard Corrosive material

SARA Title III - Section 313. (Phosphoric acid solutions) 85%

State Regulations  
Massachusetts Right To Know. (Phosphoric acid solutions)

New Jersey Right To Know. (Phosphoric acid solutions)

Pennsylvania Right To Know. (Phosphoric acid solutions)

California Proposition 65:  
This product does not contains a chemical known in the state of California to cause cancer, birth defects or other reproductive harm.

## SECTION 16. OTHER INFORMATION

<b>NFPA Rating</b>	<b>Health - 3</b>	<b>Flammability - 2</b>	<b>Instability - 1</b>
<b>SDS Prepared By</b>	B.E.R		
<b>Phone No.</b>	(315) 782-3000		
<b>Date of Preparation</b>	September 23, 2016		
<b>Date of Last Revision</b>	June 30, 2023		
<b>Revision Indicators</b>	Revision 4 Updated: . Toxicological, Ecological, and Exposure Controls/Personal Protection Information		

SECTION 15. REGULATORY INFORMATION Updated C.A.S.# Additional Information;  
reviewed and approved

**Key to Abbreviations** ACGIH® = American Conference of Governmental Industrial Hygienists  
HSDB® = Hazardous Substances Data Bank  
IARC = International Agency for Research on Cancer  
NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health  
NTP = National Toxicology Program  
OSHA = US Occupational Safety and Health Administration  
RTECS® = Registry of Toxic Effects of Chemical Substances

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).  
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** NOTE: The information contained herein is, to the best of our knowledge, accurate and reliable. However, no warranty is expressed or implied regarding the accuracy of this information, or the results to be obtained from the use thereof.

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Product Identifier: Furaglas Catalyst - Ver. 4  
Date of Preparation: September 23, 2016  
Date of Last Revision: June 30, 2023

SDS No.: 092

Page 08 of 08