



## AR-20-C Powder

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	AR-20-C Powder
<b>Other Means of Identification</b>	None
<b>Product Family</b>	Carbon and acid
<b>Recommended Use</b>	Mixed with another component to form a corrosion-resistant mortar.
<b>Restrictions on Use</b>	None known.
<b>Manufacturer/Supplier Identifier</b>	The Stebbins Engineering and Manufacturing Company, 363 Eastern Boulevard, Watertown, NY, 13601, (315) 782-3000, <a href="http://www.stebbinseng.com">www.stebbinseng.com</a>
<b>Emergency Phone No.</b>	Chemtrec - Within North America, 1-800-424-9300, 24 hours Stebbins 24 Hour Contact-, 1-315-788-6624
<b>SDS No.</b>	006

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Acute toxicity (Oral) - Category 4; Acute toxicity (Dermal) - Category 4; Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A

#### Label Elements



Signal Word:  
Warning

#### Hazard Statement(s):

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

#### Precautionary Statement(s):

P261	Avoid breathing dust.
P264	Wash hands and skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing.
P280	Wear eye protection/face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

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P302 + P352 IF ON SKIN: Wash with plenty of water.

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.

P312 Call a POISON CENTRE or doctor if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

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

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Carbon	7440-44-0	91 - 96 %	None	None
p-Toluenesulfonic acid	104-15-4	3 - 6 %	None	None
Polymeric Ethylene Imine Compound	9002-98-6	1.5 - 3 %	None	None

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

##### Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

##### Ingestion

Call a Poison Centre or doctor if you feel unwell.

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

If inhaled: can irritate the nose and throat. If swallowed: can irritate the mouth, throat and stomach. If on skin: causes mild irritation. If in eyes: causes moderate to severe irritation. May cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result.

#### Immediate Medical Attention and Special Treatment

##### Target Organs

Eyes, skin, lungs.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

##### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

##### Unsuitable Extinguishing Media

None known.

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

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

### 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.

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## Environmental Precautions

It is good practice to prevent releases into the environment.

## Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid breathing in this product. Do not get in eyes, on skin or on clothing. Avoid generating dusts. Wear personal protective equipment to avoid direct contact with this chemical. Wash hands thoroughly after handling this material. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

### Conditions for Safe Storage

Store in an area that is: cool, dry.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL: 15 mg/m<sup>3</sup>

OSHA TLV: 10 mg/m<sup>3</sup>

### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear approved safety glasses. When there is potential for eye exposure to Liquid, vapor or mist, wear safety goggles.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Cover as much exposed skin as possible. Wear resistant gloves (consult your safety equipment supplier). Discard gloves that show tears, pinholes, or signs of wear. Suitable materials are butyl rubber, natural rubber, neoprene rubber, nitrile rubber, polyethylene, polyvinyl, alcohol, Viton®, polyvinyl chloride, cloth, and leather.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s).

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Black powder. Particle Size: Fine.
Odour	Odourless
Odour Threshold	Not available
pH	2.3 - 3.0 (5% solution)
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Boiling Range	Not available
Flash Point	Not available
Evaporation Rate	Not applicable
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.54

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<b>Solubility</b>	Insoluble in water
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not applicable (kinematic); Not applicable (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not available
<b>Bulk Density</b>	96.0 lb/ft <sup>3</sup> (1537.8 kg/m <sup>3</sup> )
<b>Surface Tension</b>	Not applicable
<b>Critical Temperature</b>	Not available
<b>Electrical Conductivity</b>	Not available
<b>Vapour Pressure at 50 deg C</b>	Not applicable
<b>Saturated Vapour Concentration</b>	Not applicable

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

Reacts in the presence of alkaline conditions (high pH).

### Conditions to Avoid

Alkaline conditions (high pH).

### Hazardous Decomposition Products

None known.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Skin contact; eye contact; inhalation. if dust is generated.

### Acute Toxicity

#### LC50 (Inhalation)

No information was located.

#### LD50 (Oral)

Polymeric Nitrogen Compound: Acute 250 mg/kg (Rat)  
p-toluenesulfonic acid: Acute 2570 mg/kg (Rat) 1683 mg/kg (Mouse)  
Carbon Powder: 1600 mg/kg

#### LD50 (Dermal)

No information was located.

### Skin Corrosion/Irritation

Human experience shows mild irritation.

### Serious Eye Damage/Irritation

May irritate or burn the eyes. Permanent damage including blindness may result.

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

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### **Inhalation**

Harmful based on information for closely related materials. (Carbon ) hazardous in case of inhalation (lung irritant).

### **Skin Absorption**

May be harmful based on information for closely related materials. Can cause skin irritation.

(p-Toluenesulfonic acid). (Polymeric Ethylene Imine Compound) slightly hazardous in case of skin contact (permeator).

### **Ingestion**

Harmful based on information for closely related materials. May cause Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

### **Aspiration Hazard**

Not known to be an aspiration hazard.

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

If inhaled: causes irritation of the respiratory system. May cause respiratory tract injury. Following skin contact: symptoms may include dry, red, cracked skin (dermatitis).

### **Respiratory and/or Skin Sensitization**

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

### **Carcinogenicity**

ACGIH®: A4 – Not classifiable as a human carcinogen.

NTP: Not known to cause cancer.

IARC: Group 3 – Not classifiable as to its carcinogenicity to humans.

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists.

NTP = National Toxicology Program.

IARC = International Agency for Research on Cancer.

### **Reproductive Toxicity**

#### **Development of Offspring**

Product: not known to harm the unborn child.

(p-Toluenesulfonic acid). (Polymeric Ethylene Imine Compound) tERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY.

#### **Sexual Function and Fertility**

Not known to cause effects on sexual function or fertility.

(p-Toluenesulfonic acid). (Polymeric Ethylene Imine Compound) classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED] [Acetone].

#### **Effects on or via Lactation**

Not known to cause effects on or via lactation.

### **Germ Cell Mutagenicity**

No information was located.

### **Interactive Effects**

No information was located.

### **Other Information**

p-Toluenesulfonic acid

Polymeric Ethylene Imine Compound

The substance is toxic to central nervous system (CNS). The substance may be toxic to kidneys, the reproductive system, liver, skin. Repeated or prolonged exposure to the substance can produce target organs damage.

## **SECTION 12. ECOLOGICAL INFORMATION**

Environmental information was not located.

### **Ecotoxicity**

No information was located.

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**Persistence and Degradability**

No information was located.

**Bioaccumulative Potential**

No information was located.

**Mobility in Soil**

Studies are not available.

**Other Adverse Effects**

There is no information available.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user.

**SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT		Non-Regulated		
IATA (Air)		Non-Regulated		
IMO (Marine)		Non-Regulated		
Canadian TDG		Non-Regulated		

**Special Precautions** Not applicable

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

Not applicable

**SECTION 15. REGULATORY INFORMATION****Safety, Health and Environmental Regulations****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 on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720. SARA Title III - Section 311/312: 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). SARA Title III - Section 313: Not applicable.

Pennsylvania Right To Know: Not applicable.

OSHA hazardous chemical under 29 CFR 1910.1200 Hazardous Chemical, include in HazCom program.

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HMIS  
Health Rating: 1  
Fire Rating: 1  
Reactivity Rating: 0  
Specific Rating: 0.

## SECTION 16. OTHER INFORMATION

<b>NFPA Rating</b>	<b>Health - 1    Flammability - 0    Instability - 1</b>
<b>SDS Prepared By</b>	B.E.R
<b>Phone No.</b>	(315) 782-3000
<b>Date of Preparation</b>	August 25, 2015
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<b>Revision Indicators</b>	Revision 6 Updated C.A.S.# Updated: . Toxicological, Ecological, and Exposure Controls/Personal Protection Information
<b>Key to Abbreviations</b>	reviewed and approved 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
<b>References</b>	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).
<b>Disclaimer</b>	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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