



**Arch  
Chemicals,  
Inc.**

## SAFETY DATA SHEET

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE  
USA: 1-423-780-2970)

1-800-424-9300 (OUTSIDE  
USA: 1-703-527-3887)

1-800-511-MSDS (OUTSIDE  
USA: 1-423-780-2347)

PRODUCT NAME: **PULSAR® SUNSCREEN 20 STABILIZER**

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Arch Chemicals, Inc.**  
**1200 Bluegrass Lakes Parkway**  
**Alpharetta, GA 30004**

REVISION DATE: 05/27/2015

SUPERCEDES: 07/18/2013

MSDS Number: 000000023221

SYNONYMS: Isocyanuric acid, Cyanuric acid

CHEMICAL FAMILY: Isocyanurate

DESCRIPTION / USE: Chlorine stabilizer for swimming pool  
use

FORMULA: C<sub>3</sub>H<sub>3</sub>N<sub>3</sub>O<sub>3</sub>

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin irritation : Category 2

Eye irritation : Category 2B

Specific target organ toxicity -  
single exposure : Category 3

#### GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H320 Causes eye irritation.  
H335 May cause respiratory irritation.

Precautionary statements : **Prevention:**  
P261 Avoid breathing vapours.



P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

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

P321 Specific treatment (see supplemental first aid instructions on this label).

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

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

**Other hazards**

None known.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>CAS OR CHEMICAL NAME</u>           | <u>CAS #</u> | <u>% RANGE</u> |
|---------------------------------------|--------------|----------------|
| 1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE | 108-80-5     | 95 - 100       |

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## SECTION 4. FIRST AID MEASURES

|               |                                                                                                                                                     |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation:   | IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.            |
| Skin Contact: | IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.                |
| Eye Contact:  | IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.                                 |
| Ingestion:    | IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person. |



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## SECTION 5. FIREFIGHTING MEASURES

|                                              |                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammability Summary (OSHA):                 | Product is not known to be flammable, combustible, pyrophoric or explosive.                                                                                                                                      |
| <u>Flammable Properties</u>                  |                                                                                                                                                                                                                  |
| Flash Point:                                 | Not applicable                                                                                                                                                                                                   |
| Autoignition Temperature:                    | Not applicable                                                                                                                                                                                                   |
| Fire / Explosion Hazards:                    | Material will not ignite or burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.                                                                      |
| Extinguishing Media:                         | Choose extinguishing media suitable for surrounding materials.                                                                                                                                                   |
| Fire Fighting Instructions:                  | In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus. Use water to cool containers. |
| Hazardous Combustion Products:               | Carbon monoxide, Carbon dioxide                                                                                                                                                                                  |
| Upper Flammable / Explosive Limit, % in air: | Not applicable                                                                                                                                                                                                   |
| Lower Flammable / Explosive Limit, % in air: | Not applicable                                                                                                                                                                                                   |

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

|                                               |                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Protection for Emergency Situations: | Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.                                                                                                                                                                          |
| <u>Spill Mitigation Procedures</u>            |                                                                                                                                                                                                                                                                                                  |
| Air Release:                                  | Not applicable                                                                                                                                                                                                                                                                                   |
| Water Release:                                | This material is heavier than and slightly soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.                                                                                                                |
| Land Release:                                 | Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Do not place spill materials back in their original containers. Contain all solids for treatment or disposal.                                                                                            |
| Additional Spill Information :                | Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration. |

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## SECTION 7. HANDLING AND STORAGE

|           |                                                                                                                          |
|-----------|--------------------------------------------------------------------------------------------------------------------------|
| Handling: | Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. |
|-----------|--------------------------------------------------------------------------------------------------------------------------|



Storage: Store in a cool, dry and well ventilated place. Keep containers tightly closed when not in use.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

### Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible.

Respirator Type : Wear a NIOSH approved N95 respirator.

Skin Protection : Wear impervious gloves to avoid skin contact.

Eye Protection: Use safety glasses with side shields. Emergency eyewash should be provided in the immediate work area.

Protective Clothing Type: Impervious

### Components with workplace control parameters

| Components (CAS-No.)                                | Value | Control parameters | Basis (Update) |
|-----------------------------------------------------|-------|--------------------|----------------|
| 1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE<br>(108-80-5) | TWA   | 10 mg/m3           | WEEL (2012)    |
|                                                     | TWA   | 5 mg/m3            | WEEL (2012)    |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid

Form: granules or powder

Color: white

Odor: None

Molecular Weight: 129.08 g/mol

pH : Approximately 5.0

Boiling Point: Decomposes

Melting point/freezing point: 626 °F (330 °C)  
Sublimes

Density: 0.7900 - 0.8500g/cc

Vapor Pressure: Nil

Vapor Density: Not applicable

Viscosity: No data

Fat Solubility: No data



Solubility in Water: 1.20000 gm /100 ml

Partition coefficient n-octanol/water: No data.

Evaporation Rate: Nil

Oxidizing: No data

Volatiles, % by vol.: Not applicable

VOC Content No data

HAP Content No data

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## SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization.

Conditions to Avoid: High temperatures, Contact with incompatible substances oxidizers

Chemical Incompatibility: oxidizers

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Oxides of nitrogen, cyanic acid

Decomposition Temperature: >300 °C - ,

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Component Animal Toxicology

#### Oral LD50 value:

1,3,5-TRIAZINE- LD50 > 10,000 mg/kg Rat  
2,4,6(1H,3H,5H)-  
TRIONE

### Component Animal Toxicology

#### Dermal LD50 value:

1,3,5-TRIAZINE- LD50 > 7,940 mg/kg Rabbit  
2,4,6(1H,3H,5H)-  
TRIONE

### Component Animal Toxicology

#### Inhalation LC50 value:

1,3,5-TRIAZINE- No data  
2,4,6(1H,3H,5H)-  
TRIONE

### Product Animal Toxicity

Oral LD50 value: LD50 Believed to be > 5,000 mg/kg Rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg Rabbit

Inhalation LC50 No data

#### value:

Skin Irritation: Not expected to be irritating to the skin.



|                                          |                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye Irritation:                          | May cause mild eye irritation.                                                                                                                   |
| Skin Sensitization:                      | This material is not known or reported to be a skin or respiratory sensitizer.                                                                   |
| Acute Toxicity:                          | May cause mild eye irritation. Ingestion may cause mild gastrointestinal discomfort.                                                             |
| Subchronic / Chronic Toxicity:           | Target organ damage to the kidneys from ingestion due to precipitation of crystals of cyanuric acid which results in formation of kidney stones. |
| Reproductive and Developmental Toxicity: | This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.                                                  |
| Mutagenicity:                            | This chemical has been tested in a battery of mutagenicity/genotoxicity assays and the results were negative.                                    |
| Carcinogenicity:                         | This material did not cause cancer in long-term animal studies.                                                                                  |

## SECTION 12. ECOLOGICAL INFORMATION

Overview: Practically non- toxic to fish and other aquatic organisms., Practically non-toxic to wildlife and domestic animals.

### Ecological Toxicity Values for: 1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE

|                                      |                                    |
|--------------------------------------|------------------------------------|
| Bluegill sunfish                     | - (static). 96 h LC50 > 2,100 mg/l |
| Pimephales promelas (fathead minnow) | - (static). 96 h LC50 > 2,100 mg/l |
| Rainbow trout (Salmo gairdneri),     | - (static). 96 h LC50 > 2,100 mg/l |
| Daphnia magna,                       | - (static). 48 h LC50 > 1,000 mg/l |
| Algae                                | - 96 h EC50 = 655 mg/l             |
| Bobwhite quail                       | - 8 day dietary LC50 > 10,000 ppm  |
| Mallard duck                         | - 8 day dietary LC50 > 10,000 ppm  |

## SECTION 13. DISPOSAL CONSIDERATIONS

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.**

Waste Disposal Summary : If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it



listed as a hazardous waste under Subpart D.

Disposal Methods :

As a nonhazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes :

Not applicable

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## SECTION 14. TRANSPORT INFORMATION

### **DOT**

Not dangerous goods

### **TDG**

Not dangerous goods

### **IATA**

Not dangerous goods

### **IMDG-CODE**

Not dangerous goods

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## SECTION 15. REGULATORY INFORMATION

### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### **US State Regulations**

#### **Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

#### **Pennsylvania Right To Know**

No components are subject to the New Jersey Right to know act

#### **New Jersey Right To Know**

No components are subject to the New Jersey Right to know act



**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

- TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.
- : 6-Amino-1,3,5-triazine-2,4(1H,3H)-dione

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## **SECTION 16. OTHER INFORMATION**

SECTIONS REVISED: 1, 14  
Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .