



## SAFETY DATA SHEET

### SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name: **Westco AO 168**

Other means of identification:

Product Description: Westco AO 168 is a versatile secondary antioxidant giving excellent protection to melt flow & color during thermal processing.

Synonyms: Tris(2,4-di-tert-butylphenyl) phosphite; Antioxidant 168

Recommended use of the chemical and restrictions on use:

Product Use/Restriction: Westco AO 168 is a versatile secondary antioxidant giving excellent protection to melt flow & color during thermal processing. It can be used in a variety of polymers, including polyolefins, polycarbonates, polyesters and styrenics. It is normally used with hindered phenols, like AO-1010 or AO-1076 for synergistic performance. It may also be used with UV absorbers or hindered light stabilizers for optimal performance. AO-168 has excellent resistance to extraction during submersion in water. It acts to decompose and scavenge hydroperoxide free radicals during polymer processing

Chemical distributor, or other responsible party Name, address, and telephone number:

Distributor Name: Western Reserve Chemical Corporation

Address: 4837 Darrow Road  
Stow, OH 44224  
USA

General Phone Number: 330 650 2244

General Fax Number: 330 650 2255

Emergency phone number:

Emergency Phone Number: Chemtrec 1 800 424 9300 USA

Website: www.wrchem.com

### SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Class: Not classified

Hazard Statements: Not applicable.

Precautionary Statements: Not applicable.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Tris(2,4-di-tert-butylphenyl) phosphite

Eye: May cause watering, redness and stinging sensation. Not expected to be a hazard in normal use.

Skin: Contact: May cause itching and redness. Not expected to be a hazard in normal use.

Inhalation: Not expected to be a hazard in normal use.

Ingestion: Not expected to be a hazard in normal use.

Carcinogenicity: This material is not considered a carcinogen.

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
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## SECTION 4 : FIRST AID MEASURES

### Description of necessary measures:

<b>Eye Contact:</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
<b>Inhalation:</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
<b>Ingestion:</b>	If conscious, drink plenty of water. In case of vomiting, be sure that vomit can freely drain. If unconscious, do not drink anything. Get medical attention if required.
<b>Notes :</b>	General advice : In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Most important symptoms and effects, both acute and delayed:As with any dust, an irritation may be possible to the eyes, respiratory system and skin. Indication of any immediate medical attention and special treatment needed :No information available.

## SECTION 5 : FIRE FIGHTING MEASURES

### Suitable and unsuitable extinguishing media:

<b>Suitable Extinguishing Media:</b>	Water spray, carbon dioxide, dry chemical or chemical foam.
<b>Unsuitable extinguishing media:</b>	No information available.

### Special protective equipment and precautions for fire-fighters:

<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Fire Fighting Instructions:</b>	Advice for firefighters:Wear self-contained breathing apparatus and protective suit. Stay upwind. Ensure adequate ventilation, especially in confined areas. Move containers from fire area if you can do it without risk. Cool drums with water spray. Do not allow run-off from fire-fighting to enter drains or water courses. Evacuate personnel to safe areas.
<b>Notes :</b>	Special hazards arising from the substance or mixture :Thermal decomposition can lead to release of irritating and toxic gases and vapors Carbon oxides (COx)

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures:

<b>Personnel Precautions:</b>	Personal precautions, protective equipment and emergency procedures Use personal protection recommended in Section 8 Avoid contact with eyes and skin Ensure adequate ventilation, especially in confined areas Remove all sources of ignition Avoid breathing vapors or mists
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### Environmental precautions:

<b>Environmental Precautions:</b>	Do not flush into sanitary sewer or bury into ground to avoid impact on environment. Local authorities should be advised if significant spillages cannot be contained
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### Methods and materials for containment and cleaning up:

<b>Methods for containment:</b>	Methods and material for containment and cleaning up:Vacuum or sweep up material and place into a suitable disposal container. Avoid dust formation. Thoroughly flush residue with water.
<b>Methods for cleanup:</b>	Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.
<b>Notes :</b>	Reference to other sections:See Section 7 for more information See section 8 for more information See section 13 for more information

## SECTION 7 : HANDLING and STORAGE

### Precautions for safe handling:

<b>Handling:</b>	Handle in accordance with good industrial hygiene and safety practice Use personal protective equipment as required Avoid contact with skin, eyes or clothing Wash thoroughly after handling Keep only in original container Keep away from heat/sparks/open flames/hot surfaces. — No smoking Do not eat, drink or smoke when using this product
<b>Hygiene Practices:</b>	Do not inhale vapors, fumes or mists of this product. Wash exposed areas thoroughly after handling this product. When using, do not eat, drink or smoke.

### Conditions for safe storage, including any incompatibilities:

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Keep away from food and drink. Keep away from heat, sparks, flame and other sources of ignition. Keep away from clothing as well as other incompatible materials.

**Specific end use(s):**

**Work Practices:** Safety showers and eye wash stations should be available.

**Notes :** Specific end use(s): Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

## SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

**EXPOSURE GUIDELINES:**

**Appropriate engineering controls:**

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep air fresh. Environmental exposure controls : Prevent formation of dust.

**Individual protection measures:**

**Eye/Face Protection:** Wear safety goggles. Eye wash stations should be available.

**Skin Protection Description:** Apron or coveralls should be used to prevent contact with skin or clothing.

**Hand Protection Description:** Wear protective gloves

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment

**PPE Pictograms:**



**Notes :** Control parameters : Not established  
Derived No Effect Level (DNEL) : No information available.  
Predicted No Effect Concentration (PNEC) : No information available.

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

**PHYSICAL AND CHEMICAL PROPERTIES:**

**Physical State:** Appearance : Solid, crystalline powder  
**Color:** White Odor Odorless  
**Odor Threshold:** Not Available  
**Boiling Point:** not determined  
**Melting Point:** Melting point/freezing point : 182-186.5  
**Density:** 0.616g/cm<sup>3</sup>  
Relative density: Not determined  
**Specific Gravity:** not determined  
**Vapor Density:** not determined  
**Vapor Pressure:** 1.3×10<sup>-8</sup> Pa  
**Evaporation Rate:** not determined  
**pH:** 6.0 for a 1% suspension in water  
**Flash Point:** >150  
**Auto Ignition Temperature:** 380  
**Explosive Properties:** Not an explosive  
**Oxidizing Properties:** not determined

**9.2. Other information:**

**Notes :** Flammability (solid, gas) : Not flammable  
Flammability Limit in Air: Not determined  
Bulk density: Not determined  
Kinematic viscosity: Not applicable  
Other information : No information available

## SECTION 10 : STABILITY and REACTIVITY

**Reactivity:**

**Reactivity:** Stable under recommended storage and handling conditions (see SECTION 7, handling and storage). Possibility of hazardous reactions: There is a risk of explosion if an air-dust mixture forms. Do not smoke or weld at the workplace. Use grounding bands to minimize static.

**Chemical Stability:**

**Chemical Stability:** Stable under normal conditions.

**Conditions To Avoid:**

**Conditions to Avoid:** Heat, flames and sparks  
Static discharges  
Incompatible materials

Incompatible Materials:

Incompatible Materials: Strong acids. Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products:

Special Decomposition Products: Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)

## SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

**Acute Toxicity:** Oral: LD50 > 2000 mg/kg (Rat)

**Eye:** No eye irritation.

**Skin:** Not irritating to skin.

**Inhalation:** Aspiration hazard : No information available.

**Sensitization:** No sensitization responses were observed.

**Mutagenicity:** No information available.

**Reproductive Toxicity:** No information available.

## SECTION 12 : ECOLOGICAL INFORMATION

Persistence and degradability:

**Biodegradation:** Persistence and degradability : Not biodegradable

Bioaccumulative potential:

**Bioaccumulation:** Bioaccumulative potential : OECD303A: 45% (Coupled-Units-Test)

Mobility in soil:

**Mobility In Environmental Media:** Mobility in soil : No information available

Tris(2,4-di-tert-butylphenyl) phosphite :

Bioaccumulative potential:

**Bioaccumulation:** Bioconcentration factor (BCF) :4.66

Other adverse effects:

**Effect of Material On Aquatic Life:** Algae/aquatic plants EC50 :> 75 mg/l/72h (Scenedesmus sp.)  
Fish LC50 :> 49 mg/l/96h (Zebra fish)  
Crustacea EC50:> 510 mg/l/24h (Daphnia magna)

## SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

**Waste Disposal:** Waste treatment methods  
Waste from residues/unused products:Residuals should be disposed by incineration or other modes of disposal in consistent with federal, state, and local regulations.

**Contaminated Packaging:** Contaminated packaging :Contaminated packaging material should be treated same as the residuals.  
Non-contaminated may be re-used or re-cycled.

## SECTION 14 : TRANSPORT INFORMATION

**DOT Shipping Name:** Non regulated.

**DOT Pictograms:**



**IATA Shipping Name:** Non regulated.

**IATA Pictograms:**



**IMDG Shipping Name :** Non regulated.

**ADR Shipping Name :** Non regulated.

**RID Shipping Name :** Non regulated.

**ICAO Shipping Name:** Non regulated.

**Notes :** Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :Not applicable

**SECTION 15 : REGULATORY INFORMATION**

Safety, health and environmental regulations specific for the product:

**Tris(2,4-di-tert-butylphenyl) phosphite :**

**TSCA Inventory Status:** All components of this product are listed in the TSCA inventory of Chemicals Substances.  
**SARA:** This product does not contain any material regulated under Title III, Section 302, 304, or 313  
**CERCLA Section 302:** Non regulated.  
**EC Number:** 250-709-6

**SECTION 16 : ADDITIONAL INFORMATION**

HMIS Ratings:

**HMIS Health Hazard:** 1  
**HMIS Fire Hazard:** 1  
**HMIS Reactivity:** 0  
**HMIS Personal Protection:** J

<b>Health Hazard</b>	<b>1</b>
<b>Fire Hazard</b>	<b>1</b>
<b>Reactivity</b>	<b>0</b>
<b>Personal Protection</b>	<b>J</b>

**SDS Revision Date:** August 04, 2015

**Notes :** Important Note: This information relates to the specific product described herein and may not be valid for this material when used in combination with other raw materials. The information provided is without warranty regarding its accuracy or completeness. The information may not be valid under all conditions. The user has the final responsibility for determining the suitability of the product in a given application.

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