

# Material Safety Data Sheet

May be used to comply with  
 OSHA's Hazard Communication Standard  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

## PRODUCT IDENTITY – SECTION I

<b>Product Name:</b> OPTIMUS SERIES RETARDER <b>CAS #:</b> See Below <b>Manufacturer:</b> Arcal Chemicals, Inc. <b>Address:</b> 223 Westhampton Avenue Capitol Heights, MD 20743	<b>Emergency Tele:</b> (800) 424-9300 <b>Revision Date:</b> 01 January 2009 <b>Other Tele:</b> (301) 336-9300 <b>Fax:</b> (301) 336-6597
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## HAZARDOUS INGREDIENTS / OTHER COMPONENTS – SECTION II

MATERIAL / CAS #	ACGIH (TLV – TWA)	OSHA (PEL -TWA)
All additives are non-hazardous and completely biodegradable.  (VOC content calculated from national volatile organic emission standards for architectural coatings: Less than 6g/L / 0.05 lb/gal)	N/A	N/A

## PHYSICAL DATA – SECTION III

<b>APPEARANCE :</b> Opaque liquid solution	<b>ODOR:</b> Mild	<b>MELT POINT:</b> N/A	<b>SPECIFIC GRAVITY:</b> 1.04 – 1.1
<b>VAPOR DENSITY:</b> N/A	<b>% VOLATILE BY VOLUME:</b> N/A	<b>BULK DENSITY:</b> N/A	<b>BOILING POINT:</b> 110°C
<b>VAPOR PRESSURE:</b> N/A	<b>% SOLUBILITY (H2O):</b> Complete		

## FIRE AND EXPLOSION HAZARD DATA – SECTION IV

<b>FLASH POINT:</b> None	<b>NFPA FIRE HAZARDS</b>  <table border="1"> <tr> <td><b>HEALTH</b></td> <td>0</td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td>0</td> </tr> <tr> <td><b>REACTIVITY</b></td> <td>0</td> </tr> <tr> <td><b>SPECIFIC</b></td> <td></td> </tr> </table>	<b>HEALTH</b>	0	<b>FLAMMABILITY</b>	0	<b>REACTIVITY</b>	0	<b>SPECIFIC</b>	
<b>HEALTH</b>		0							
<b>FLAMMABILITY</b>		0							
<b>REACTIVITY</b>		0							
<b>SPECIFIC</b>									
<b>FLAMMABLE LIMITS</b> <b>LEL:</b> None <b>UEL:</b> None									
<b>EXTINGUISHING MEDIA:</b> Water, dry chemical, foam									
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b> None									
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b> None <b>DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:</b> None <b>EMPTY CONTAINER WARNING:</b> None									

4 = EXTREME  
 3 = HIGH  
 2 = MODERATE  
 1 = SLIGHT  
 0 = INSIGNIFICANT

## REACTIVITY DATA – SECTION V

**Stability:** Stable & polymerization will not occur

**CONDITIONS TO AVOID:** None known

**INCOMPATIBILITY (MATERIAL TO AVOID):** Avoid contact with strong oxidizing material.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** None

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Strong oxidizing agents

## HEALTH HAZARD DATA – SECTION VI

**Route(s) of Entry:**      **Inhalation?**    Yes                      **Skin?**    Yes                      **Ingestion?**    Yes

**Health Hazards (Acute and Chronic):** Irritation of skin and eyes.

**CARCINOGENICITY:** None

**NTP?**    N/A

**IARC Monographs?**    N/A

**OSHA?** N/A

**MEDICAL CONDITIONS GENERALLY AGGRAVATED by EXPOSURE:** Skin and eye inflammation.

## EMERGENCY AND FIRST AID PROCEDURES

**EYE CONTACT:** If splashed into eyes, rinse eyes with large amounts of water for at least 15 minutes or until irritation subsides, and get immediate medical attention.

**SKIN CONTACT:** In case of skin contact, remove any contaminated clothing, wash skin thoroughly with soap and water; flush exposed area with large quantities of water and get medical attention.

**INHALATION:** If overcome by vapor, remove person to fresh air if breathing is difficult, and give oxygen; seek medical attention. If breathing has stopped, start resuscitation, and administer oxygen if available. Seek immediate medical attention.

**INGESTION:** If ingested, DO NOT induce vomiting; call a physician immediately.

## PRECAUTIONS FOR SAFE HANDLING AND USE – SECTION VII

**Steps to be taken in case material is released or spilled:** Collect spill and flush area with plenty of water.

**Waste Disposal Method:** Flush with plenty of water.

**Precautions to be taken in handling and storing:** Store in dry area. Keep containers closed when not in use. Avoid prolonged contact with skin and eyes.

## CONTROL MEASURES – SECTION VIII

**Respiratory or breathing apparatus:** Use supplied-air respiratory protection in confined or enclosed spaces, if needed.

**Ventilation:** Yes

**Local Exhaust:**  
**Mechanical:** General air dilution

**Special:**  
**Other:**

**Protective Gloves:** Chemical resistant rubber. Check for holes.    **Eye Protection:** Face shield or goggles

**Other Protective Clothing or Equipment:** Chemical resistant apron, boots and other protective gear.

## TRANSPORTATION INFORMATION

**WATER-BASE PAINT – NOT REGULATED FOR TRANSPORTATION**