



ARCHITECTURAL CONCRETE CHEMICALS

SAFETY DATA SHEET

Revision Date: 25 March 2014

1. IDENTIFICATION OF THE PRODUCT AND MANUFACTURER

Optimus Series Surface Retarders

Arcal Chemicals, Inc.

223 Westhampton Avenue
Capitol Heights, MD 20743

Telephone: 301-336-9300

Fax: 301-336-6597

Emergency: Chem Trec 800-424-9300

2. HAZARDS IDENTIFICATION

Optimus surface retarders are aqueous emulsions containing film-formers and materials to retard the set of concrete. They boil above 212 F and have no flash point below that temperature; dried film will not burn easily.

Spraying the retarder can produce mist which is irritating if inhaled. Part of the retarder system includes organic acids which will cause irritation upon eye contact. Prolonged skin contact may cause skin irritation. Inhalation of the mist may cause nasal irritation. Ingestion of more than a spoonful may result in stomach upset.

The preservative has been recognized as a possible sensitizer, so avoid unnecessary skin contact.

They do not contain known carcinogens.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<i>Hazardous Component</i>	<i>CAS #</i>	<i>Conc.</i>
Tartaric and/or	87-69-4	0-10
Citric acids	77-92-9	0-10
Chloromethyl isothiazolone	26172-55-4	<0.2%

4. FIRST AID MEASURES

Eye contact: Flush with clean water for 15 minutes or until irritation subsides. If irritation persists, seek medical advice.

Inhalation of mist: Move the exposed person to fresh air. Administer oxygen or begin resuscitation if necessary.

Skin contact: Remove contaminated clothing, then wash skin with soap and water and launder clothing before reuse.

Ingestion: In case of this unlikely event, do not induce vomiting (to avoid getting material into the lungs) and obtain medical help if stomach upset occurs.

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5. FIRE-FIGHTING MEASURES

NFPA FIRE HAZARDS:

HEALTH 0 (insignificant)	FLAMMABILITY 0 (insignificant)	REACTIVITY 0 (insignificant)
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Prevent misting with adequate ventilation and proper spray nozzle setting.
Fire is unlikely due to the high concentration of water in the products.

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6. ACCIDENTAL RELEASE MEASURES

In case Optimus retarders are spilled, treat with absorbent material like vermiculite, kitty litter or sand, scoop up and dispose with regard to local regulations with consideration for unreacted acid content. After use on concrete, unreacted acid will be essentially zero.

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7. HANDLING AND STORAGE

Store Optimus Surface Retarders in a cool dry place where heat from equipment or the sun will not expose the product to temperature extremes.

Do not allow material to freeze. Freezing can cause separation of the emulsion and make the product unsprayable.

When spraying, use care to avoid spreading mist into unintended areas.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Splash-proof safety goggles and chemically resistant gloves (without tears, pinholes or other signs of wear) are highly recommended to protect personnel.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Creamy liquid; color varies with etch grade
Odor: Mild
Density: 8.5 - 9.1 pounds per gallon
Boiling point: >212 F
Volatile Organic Content (VOC): <25 g/L, or low-solids exempt
Solubility in water: >80%; remainder dispersible
Flash point: none
pH: 1.5 - 2.5 (acidic, comparable to strong vinegar)

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10. STABILITY AND REACTIVITY

Optimus surface retarders are not subject to runaway polymerization. The major hazard is irritation (and possibly corrosion of metal) from windblown mist when the product is sprayed. Do not mix Optimus surface retarders with other chemicals like nitric acid or bleach (oxidizers).

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11. TOXICOLOGICAL INFORMATION

The primary irritant effect of Optimus surface retarders is by their acid content on eye and skin. The individual ingredients are diluted and contained in a semisolid film when the product is dried, and become relatively inert calcium salts after performing their intended purpose of concrete retardation.

The complete product has not been subjected to other toxicology tests.

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12. ECOLOGICAL INFORMATION

Do not allow large quantities of undiluted liquid product to reach ground water, water course or sewer. The product is mostly soluble in water, therefore color, odor and taste of the water can be affected.

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13. DISPOSAL CONSIDERATIONS

Do not dispose with residential garbage or allow liquid product to reach ground water or sewer.

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14. TRANSPORT INFORMATION

Water-based paint, not regulated for transport.

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15. REGULATIONS

TSCA: All ingredients are listed.

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16: OTHER INFORMATION

None available.