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# AEROSOL<sup>®</sup> OT-MSO

surfactant

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**Type:** Anionic  
**Chemical:** Sodium dioctyl sulfosuccinate  
**CAS No:** 577-11-7  
**Molecular Formula:** C<sub>20</sub>H<sub>37</sub>O<sub>7</sub>NaS  
**EPA Status:** Exempt 40 CFR 180.1001 (c) (d)  
**FDA Status:** Approved 21 CFR 175.105, 176.210

AEROSOL OT-MSO surfactant is a 62% active solution of sodium dioctyl sulfosuccinate in mineral seal oil, essentially free of water. It is miscible in all proportions with most aromatic and aliphatic hydrocarbon solvents. Although AEROSOL OT-MSO is water insoluble, it is effective in solubilizing water in organic solvents and readily forms emulsions.

## PHYSICAL AND CHEMICAL PROPERTIES

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Appearance at 25°C (77°F)	Transparent, light amber liquid
Solids, % by weight	62±1
Solvent	Mineral Seal Oil
Water content, % by weight	0.5 max
Specific gravity, 25°C	0.96-0.98
Density, lb/gal, 25°C	~8.1
Viscosity, cps, 20°C	125-300
Flash point, °F	
Setaflash (closed cup)	>255
Acid number (as is)	2.5 max
Iodine value (as is)	0.25 max

## POTENTIAL USES FOR AEROSOL OT-MSO

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1. As an additive in alkyd or oil base paints to improve wetting when applied to oily or unclean surfaces.
2. In drycleaning and spotting solutions.
3. Pigment dispersion aid.
4. Solubilization of water in organic liquids.
5. In penetrating and corrosion resistant lubricants.
6. Agricultural formulations (herbicides, pesticides).

## BIODEGRADABILITY

AEROSOL OT surfactant is readily biodegraded. In the CSMA Shake Culture Test, AEROSOL OT surfactant was completely biodegraded within two days when sewage was acclimatized to AEROSOL OT surfactant.

## EPA STATUS<sup>1</sup>

Under the provisions of 40 CFR 180.1001 (c) of the Pesticides Chemicals Regulations, AEROSOL OT surfactant is exempted from the requirement of a tolerance when used in accordance with good agricultural practice as an inert ingredient of pesticide formulations applied to growing crops or to raw agricultural commodities after harvest.

<sup>1</sup> 21 CFR 182.99 Adjuvants for Pesticide Chemicals—Adjuvants identified and used in accordance with 40 CFR 180.1001 (c) and (d), which are added to pesticide use dilutions by a grower or applicator prior to application to the raw agricultural commodity, are exempt from the requirement of tolerance.

## FDA STATUS

AEROSOL OT-MSO surfactant is permitted by 21 CFR 175.105 as a component in adhesive formulations. It is also permitted under 21 CFR 176.210 for use as a deforming agent in the manufacture of paper and paper-board.

## HEALTH AND SAFETY INFORMATION

Before handling this material, read the corresponding Cytec Industries Inc. Material Safety Data Sheet for safety, health and environmental data.

The single oral LD<sub>50</sub> of AEROSOL OT (sodium dioctyl sulfosuccinate) administered as a 20% aqueous solution for young male albino rats is greater than 5 mL/kg and the LD<sub>50</sub> by 24-hour contact with the clipped skin of male albino rabbits is greater than 10 mL/kg. AEROSOL OT is irritating to rabbit eyes but not rabbit skin.

AEROSOL OT-MSO contains mineral seal oil. Aspiration of mineral seal oil may cause lung injury, including pneumonitis. Overexposure to vapor of mineral seal oil may cause headache, dizziness, drowsiness, nausea, fatigue, pneumonitis, pulmonary edema and central nervous depression.

## STORAGE AND HANDLING

AEROSOL OT-MSO surfactant may be stored and used in a wide variety of containers or reaction vessels. Stainless steel, aluminum and Monel alloy are recommended for reaction and storage vessels; glass and rubber are suitable lining materials. Some of the sprayed resinous coatings are satisfactory in stationary tanks in which the coating can be built up more heavily than is customary in drums. In permanent installations, however, the added expense of aluminum, stainless steel or clad-steel is frequently justified.

## IMPORTANT NOTICE

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE. Nothing herein is to be taken as permission, inducement or recommendation to practice any patented invention without a license.

## TRADEMARK NOTICE

The ® indicates a Registered Trademark in the United States and the ™ or \* indicates a Trademark in the United States. The mark may also be registered, the subject of an application for registration or a trademark in other countries.

## TSCA INFORMATION

This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C.

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**CYTEC**

- **Asia/Pacific** - Cytec Industries Pte. Ltd., Singapore, tel. 65-733-6788, fax. 65-735-7783
- **Europe** - Cytec Industries B.V., Botlek, the Netherlands, tel. 31-181-295400, fax. 31-181-295401
- **Latin America** - Cytec de Argentina S.A., Buenos Aires, tel. 541-331-5088, fax. 541-345-7947
- **United States** - Cytec Industries Inc., West Paterson, NJ, U.S.A., tel. 973-357-3100, fax. 973-357-3055