

Material Safety Data Sheet

Aerosol OT Solution 10%

ACC# 00407

Section 1 - Chemical Product and Company Identification

MSDS Name: Aerosol OT Solution 10%

Catalog Numbers: SA292-4

Synonyms: None.

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7732-18-5	Water	73.52	231-791-2
111-76-2	Ethylene glycol monobutyl ether	15.00	203-905-0
577-11-7	Diethyl sodium sulfosuccinate	10.36	209-406-4
64-17-5	Ethyl alcohol	0.91	200-578-6
104-76-7	2-Ethylhexanol	0.13	203-234-3
67-64-1	Acetone	0.08	200-662-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Clear liquid.

Warning! Causes eye, skin, and respiratory tract irritation. May cause central nervous system effects.

Target Organs: Central nervous system, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. In a modified Draize-Shelanski repeat-insult patch test, sodium diethyl sulfosuccinate showed little evidence of irritation and no evidence of eliciting an allergic response in human subjects.(Cytec)

Ingestion: No hazard expected in normal industrial use. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation.

Chronic: Chronic exposure may cause effects similar to those of acute exposure.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: Not available.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers closed as evaporation of water and solvent may cause gelation.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Water	none listed	none listed	none listed
Ethylene glycol monobutyl ether	20 ppm TWA	5 ppm TWA; 24 mg/m ³ TWA 700 ppm IDLH	50 ppm TWA; 240 mg/m ³ TWA
Diethyl sodium sulfosuccinate	none listed	none listed	none listed
Ethyl alcohol	1000 ppm TWA	1000 ppm TWA; 1900 mg/m ³ TWA 3300 ppm IDLH	1000 ppm TWA; 1900 mg/m ³ TWA
2-Ethylhexanol	none listed	none listed	none listed
Acetone	500 ppm TWA; 750 ppm STEL	250 ppm TWA; 590 mg/m ³ TWA 2500 ppm IDLH	1000 ppm TWA; 2400 mg/m ³ TWA

OSHA Vacated PELs: Water: No OSHA Vacated PELs are listed for this chemical. Ethylene glycol monobutyl ether: 25 ppm TWA; 120 mg/m³ TWA Diethyl sodium sulfosuccinate: No OSHA Vacated PELs are listed for this chemical. Ethyl alcohol: 1000 ppm TWA; 1900 mg/m³ TWA 2-Ethylhexanol: No OSHA Vacated PELs are listed for this chemical. Acetone: 750 ppm TWA; 1800 mg/m³ TWA

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A NIOSH/MSHA approved or European Standard EN 149 air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Odor: none reported

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: Not available.

Molecular Formula: Mixture

Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Excess heat, allowing solvents to evaporate.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases.

Hazardous Decomposition Products: Carbon monoxide, oxides of sulfur, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 7732-18-5: ZC0110000

CAS# 111-76-2: KJ8575000

CAS# 577-11-7: WN0525000

CAS# 64-17-5: KQ6300000

CAS# 104-76-7: MP0350000

CAS# 67-64-1: AL3150000

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

CAS# 111-76-2:

Dermal, guinea pig: LD50 = 230 uL/kg;
Draize test, rabbit, eye: 100 mg Severe;
Draize test, rabbit, eye: 100 mg/24H Moderate;
Inhalation, mouse: LC50 = 700 ppm/7H;
Inhalation, mouse: LC50 = 3380 mg/m3/7H;
Inhalation, rat: LC50 = 450 ppm/4H;
Inhalation, rat: LC50 = 2900 mg/m3/7H;
Oral, mouse: LD50 = 1230 mg/kg;
Oral, mouse: LD50 = 1167 mg/kg;
Oral, rabbit: LD50 = 300 mg/kg;
Oral, rabbit: LD50 = 320 mg/kg;
Oral, rat: LD50 = 470 mg/kg;
Oral, rat: LD50 = 917 mg/kg;
Skin, rabbit: LD50 = 220

CAS# 577-11-7:

Draize test, rabbit, eye: 250 ug Mild;
Draize test, rabbit, eye: 1% Severe;
Draize test, rabbit, skin: 10 mg/24H Moderate;
Oral, mouse: LD50 = 2643 mg/kg;
Oral, rat: LD50 = 1900 mg/kg;

CAS# 64-17-5:

Draize test, rabbit, eye: 500 mg Severe;
Draize test, rabbit, eye: 500 mg/24H Mild;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Inhalation, mouse: LC50 = 39 gm/m3/4H;
Inhalation, rat: LC50 = 20000 ppm/10H;
Oral, mouse: LD50 = 3450 mg/kg;
Oral, rabbit: LD50 = 6300 mg/kg;
Oral, rat: LD50 = 7060 mg/kg;
Oral, rat: LD50 = 9000 mg/kg;

CAS# 104-76-7:

Draize test, rabbit, eye: 20 mg Severe;
Draize test, rabbit, eye: 20 mg/24H Moderate;
Draize test, rabbit, skin: 500 mg/24H Moderate;
Oral, mouse: LD50 = 2500 mg/kg;
Oral, rabbit: LD50 = 1180 mg/kg;
Oral, rat: LD50 = 3730 mg/kg;
Skin, rabbit: LD50 = 1970 mg/kg;
Skin, rat: LD50 = >3 gm/kg;

CAS# 67-64-1:

Dermal, guinea pig: LD50 = >9400 uL/kg;
Draize test, rabbit, eye: 20 mg Severe;
Draize test, rabbit, eye: 20 mg/24H Moderate;
Draize test, rabbit, eye: 10 uL Mild;
Draize test, rabbit, skin: 500 mg/24H Mild;
Inhalation, mouse: LC50 = 44 gm/m3/4H;
Inhalation, rat: LC50 = 50100 mg/m3/8H;
Oral, mouse: LD50 = 3 gm/kg;
Oral, rabbit: LD50 = 5340 mg/kg;
Oral, rat: LD50 = 5800 mg/kg;

Humans are less susceptible than rodents to 2-butoxyethanol exposure. 2-Butoxyethanol gives toxic results when tested on rabbits and rats. It does not behave the same when humans are exposed to it. This is explained by the different makeup of the red blood cells of test animals vs. humans. Test animal red blood cells are hypersensitive to 2-butoxyethanol when compared to humans.

Carcinogenicity:

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 111-76-2:

- **ACGIH:** A3 - Confirmed animal carcinogen with unknown relevance to humans
- **California:** Not listed.
- **NTP:** Not listed.
- **IARC:** Not listed.

CAS# 577-11-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 64-17-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 104-76-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 67-64-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects which together constitute the fetal alcohol syndrome.

Reproductive Effects: No data available.

Mutagenicity: No data available.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series:

CAS# 67-64-1: waste number U002 (Ignitable waste).

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7732-18-5 is listed on the TSCA inventory.
CAS# 111-76-2 is listed on the TSCA inventory.
CAS# 577-11-7 is listed on the TSCA inventory.
CAS# 64-17-5 is listed on the TSCA inventory.
CAS# 104-76-7 is listed on the TSCA inventory.
CAS# 67-64-1 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 111-76-2: Effective 4/13/89, Sunset 6/30/98 CAS# 104-76-7: Effective 6/1/87, Sunset 12/19/95

Chemical Test Rules

CAS# 67-64-1: Test for Health Effects

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 67-64-1: 5000 lb final RQ; 2270 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 111-76-2: immediate, delayed, fire.
CAS # 577-11-7: immediate.
CAS # 64-17-5: immediate, delayed, fire.
CAS # 104-76-7: immediate, fire.
CAS # 67-64-1: immediate, fire.

Section 313

This material contains Ethylene glycol monobutyl ether (listed as Glycol ethers), 15.00%, (CAS# 111-76-2) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 111-76-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 577-11-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 64-17-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota,

Massachusetts.

CAS# 104-76-7 can be found on the following state right to know lists: Pennsylvania, Massachusetts.

CAS# 67-64-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

WARNING: This product contains Ethyl alcohol, a chemical known to the state of California to cause developmental reproductive toxicity. California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7732-18-5: No information available.

CAS# 111-76-2: 1

CAS# 577-11-7: 2

CAS# 64-17-5: 0

CAS# 104-76-7: 2

CAS# 67-64-1: 0

Canada - DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 111-76-2 is listed on Canada's DSL List.

CAS# 577-11-7 is listed on Canada's DSL List.

CAS# 64-17-5 is listed on Canada's DSL List.

CAS# 104-76-7 is listed on Canada's DSL List.

CAS# 67-64-1 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 111-76-2 is listed on the Canadian Ingredient Disclosure List.

CAS# 577-11-7 is listed on the Canadian Ingredient Disclosure List.

CAS# 64-17-5 is listed on the Canadian Ingredient Disclosure List.

CAS# 104-76-7 is listed on the Canadian Ingredient Disclosure List.

CAS# 67-64-1 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997

Revision #5 Date: 3/22/2006

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.