

Material Safety Data Sheet

Product name (Avobenzone) p-t-Butyl p-Methoxydibenzoylmethane	Page: 1/4
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION PRODUCT DETAILS CAS # 70356-09-1 SUPPLIER DETAILS: MCKINLEY RESOURCES Emergency telephone number: CHEMTREC 800-424-9300	
2. COMPOSITION/INFORMATION ON INGREDIENTS CHEMICAL NAME p-t-Butyl p-Methoxydibenzoylmethane (Avobenzone) CAS number: 70356-09-1 EINECS number: Purity: >=95%	
3. HAZARDS IDENTIFICATION EMERGENCY OVERVIEW Physical State: Powder Color: White to pale yellow Odor: Weakly aromatic POTENTIAL HEALTH EFFECTS May cause skin and eye irritation. No chronic adverse effects are known. No <u>carcinogenicity</u> listed by OSHA, IARC and NTP. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.	
4. FIRST AID MEASURES EYES: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. If irritation occurs or persists, get chemical aid immediately. SKIN: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. If irritation occurs or persists, get chemical aid immediately. Wash clothing and shoes before reuse. INGESTION: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. INHALATION: Get medical aid immediately. Remove from exposure to fresh air immediately. If no breathing, give artificial respiration. If breathing is difficult, give oxygen. NOTES TO PHYSICIAN: Treat symptomatically and supportively.	

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5. FIRE-FIGHTING MEASURES GENERAL INFORMATION: Direct water stream may cause frothing and may be ineffective in fighting fires. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use caution in approaching fire. Remove containers of this material if it can be done safely. Use water to keep fire exposed containers cool. EXPLOSION HAZARDS: Weak dust explosion or dust fire hazard. During a fire, irritating and highly toxic gases may be generated by thermal Instruction decomposition or combustion. EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, halon, water Flash Point: >100 deg C Tagliabue Closed Cup (ASTM D-56) Kst: 1.00, 20 liter spherical explosion apparatus ST number: 1, Hartmann Tube	
6. ACCIDENTAL RELEASE MEASURES GENERAL INFORMATION: Use proper personal protective equipment as indicated in Section 8. SPILLS/LEAKS CLEAN UP PROCEDURES: Shut off the source of the spill or leak if it is safe to do so. Scoop or shovel spilled materials into a suitable labeled container with a tight fitting lid. Secure the drum cover and move the container to a safe holding area. Clean up spills area thoroughly. Observing precautions in the Protective Equipment section.	
7. HANDLING AND STORAGE STORAGE TEMPERATURE: Below 25 deg C SHELF LIFE: 24 months SPECIAL SENSITIVITY: Exposure to the following may affect the integrity of this material: light, moisture. Heat HANDLING: Keep away from heat, sparks and flame. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. When handling, use proper personal protective equipment specified. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. STORAGE Stored out of direct sunlight in a well-ventilated area at room temperature and in a cool, dry place. Keep container closed when not in use.	
8. EXPOSURE CONTROLS/PERSONAL PROTECTION ENGINEERING CONTROLS: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels. OSHA VACATED PELS: No OSHA Vacated PELs are listed for this chemical. PERSONAL PROTECTIVE EQUIPMENT Eye:	

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Wear chemical goggles. Skin:	
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Wear appropriate protective gloves of plastic or rubber to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: 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 a respirator's use. There are no exposure limits specified either for this material or for any its ingredients.	
9. PHYSICAL AND CHEMICAL PROPERTIES PHYSICAL STATE: Powder. APPEARANCE: White to pale yellow ODOR: Weakly aromatic FREEZING/MELTING POINT: 81-86 deg C SOLUBILITY: Insoluble in H2O. Soluble in ethanol (2%), disopropyl adipate (15%), and octyl p-methoxycinnamate (16%). Very slightly soluble in mineral oil, propylene glycol, and silicon 344 fluid. SPECIFIC GRAVITY/DENSITY: ? g/cm ³ MOLECULAR FORMULA: C ₂₀ H ₂₂ O ₃ MOLECULAR WEIGHT: 310.40	
10. STABILITY AND REACTIVITY CHEMICAL STABILITY: Stable under normal temperatures and pressures, even under fire exposure conditions and not water reactive. CONDITIONS TO AVOID: Light, elevated temperature INCOMPATIBILITIES WITH OTHER MATERIALS: Strong acids, strong bases, oxidizing agents, formaldehyde, metallic ions, PABA, heavy metals, ferric salts. HAZARDOUS DECOMPOSITION PRODUCTS: Irritating and toxic fumes and gases. Carbon dioxide and carbon monoxide. HAZARDOUS POLYMERIZATION: Not available	
11. TOXICOLOGICAL INFORMATION ACUTE TOXICITY LD50/oral/rat: > 5000 mg/kg Primary skin irritation (tested on rabbits): Irritant Primary mucous membrane irritation (tested on rabbits' eyes): Irritant Other information: No mutagenic effect on Ames-test. EXPERIENCE IN HUMANS Danger of skin sensitization on repeated contact Preparation (5%) in water: Non-irritant, no sensitizing effect	

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12. ECOLOGICAL INFORMATION ACROBIC BIODEGRADATION (H ₂ O): <10% N-OCTANOL/WATER PARTITION COEFFICIENT: >6.0	
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13. DISPOSAL CONSIDERATIONS RECOMMENDATIONS: This material is suitable for incineration. These recommendations are based on the product as shipped. Use, processing, alteration or contamination may affect these disposal recommendations. State, local or site restrictions affecting the available proper disposal options may vary. RCRA WASTE: Not regulated under RCRA EMPTY CONTAINERS: Empty containers must be triple rinsed prior to disposal, recycling, or reused.	
14. TRANSPORT INFORMATION US DOT No information available IMO Not regulated as a hazardous material. IATA Not regulated as a hazardous material. RID/ADR Not regulated as a hazardous material. CANADIAN TDG No information available.	
15. REGULATORY INFORMATION Law/Regulation: Hazardous Chemical Reporting: Community Right-to-Know 40CFR370 Common Name: SARA Title III Section 312-Hazardous Chemical Inventory Enforcement Agency: Environmental Protection Agency (EPA) Government Authority: USA Criteria Met: Non-hazardous	
16. OTHER INFORMATION 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.	