

## MATERIAL/CHEMICAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION					SECTION 3: HAZARDS IDENTIFICATION																																								
<p><b>Product Details</b></p> <p>Product Name: 0.05µm Colloidal Alumina Suspension</p> <p>Allied Item No.: 180-30000, -30010, -30015</p> <p>Chemical Name: Colloidal Alumina Dispersion</p> <p><b>Company Identification</b>                      Allied High Tech Products, Inc.                      2376 East Pacifica Place                      Rancho Dominguez, CA 90220                      (310) 635-2466</p> <p><b>Contact Point</b>                      Transportation for United States                      Chemtrec (800) 424-9300 * (202) 483-7616</p>					<p>Hazard Statement: Not listed as a carcinogen by IARC, NTP or OSHA.</p>																																								
SECTION 2: COMPOSITION/INFORMATION ON INGREDIENT					SECTION 4: FIRST AID MEASURES																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Chemical Name</th> <th style="text-align: left;">CAS No.</th> <th style="text-align: left;">Exposure Limits in Air ACGIH TLV or TWA</th> <th style="text-align: left;">OSHA PEL</th> <th style="text-align: left;">Carcin. Y/N</th> </tr> </thead> <tbody> <tr> <td>Aluminum Oxide &lt;20%</td> <td>1344-28-1</td> <td>10 mg/m3</td> <td>15 mg/m3</td> <td>N</td> </tr> <tr> <td>Deionized Water &gt;60%</td> <td>7732-18-5</td> <td>NA</td> <td>NA</td> <td>N</td> </tr> <tr> <td>Trade Secret Ingredients &lt;20%</td> <td>NA</td> <td>NA</td> <td>NA</td> <td></td> </tr> </tbody> </table>					Chemical Name	CAS No.	Exposure Limits in Air ACGIH TLV or TWA	OSHA PEL	Carcin. Y/N	Aluminum Oxide <20%	1344-28-1	10 mg/m3	15 mg/m3	N	Deionized Water >60%	7732-18-5	NA	NA	N	Trade Secret Ingredients <20%	NA	NA	NA		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="text-align: center;">Potential Health Effects</th> <th style="text-align: center;">First Aid/ Medical Info.</th> </tr> </thead> <tbody> <tr> <td>Eye Contact:</td> <td>Slightly irritating, high concentrations can cause conjunctivitis, not corrosive.</td> <td>Flush with water for 15 minutes, seek medical attention if irritation persists.</td> </tr> <tr> <td>Skin Contact:</td> <td>Not absorbed through skin. Prolonged or repeated contact may cause dermatitis.</td> <td>Wash with soap and water. If irritation persists seek medical attention.</td> </tr> <tr> <td>Inhalation:</td> <td>Spray mist or dry dust may cause congestion, coughing, granuloma in lungs. Prolonged inhalation or overexposure to dusts may cause irreversible lung damage.</td> <td>Remove to fresh air. Seek medical attention.</td> </tr> <tr> <td>Ingestion:</td> <td>May cause irritation of the digestive tract.</td> <td>Seek immediate medical attention. Give one to two glasses of water or milk.</td> </tr> <tr> <td colspan="3">Note:</td> </tr> </tbody> </table>				Potential Health Effects	First Aid/ Medical Info.	Eye Contact:	Slightly irritating, high concentrations can cause conjunctivitis, not corrosive.	Flush with water for 15 minutes, seek medical attention if irritation persists.	Skin Contact:	Not absorbed through skin. Prolonged or repeated contact may cause dermatitis.	Wash with soap and water. If irritation persists seek medical attention.	Inhalation:	Spray mist or dry dust may cause congestion, coughing, granuloma in lungs. Prolonged inhalation or overexposure to dusts may cause irreversible lung damage.	Remove to fresh air. Seek medical attention.	Ingestion:	May cause irritation of the digestive tract.	Seek immediate medical attention. Give one to two glasses of water or milk.	Note:		
Chemical Name	CAS No.	Exposure Limits in Air ACGIH TLV or TWA	OSHA PEL	Carcin. Y/N																																									
Aluminum Oxide <20%	1344-28-1	10 mg/m3	15 mg/m3	N																																									
Deionized Water >60%	7732-18-5	NA	NA	N																																									
Trade Secret Ingredients <20%	NA	NA	NA																																										
	Potential Health Effects	First Aid/ Medical Info.																																											
Eye Contact:	Slightly irritating, high concentrations can cause conjunctivitis, not corrosive.	Flush with water for 15 minutes, seek medical attention if irritation persists.																																											
Skin Contact:	Not absorbed through skin. Prolonged or repeated contact may cause dermatitis.	Wash with soap and water. If irritation persists seek medical attention.																																											
Inhalation:	Spray mist or dry dust may cause congestion, coughing, granuloma in lungs. Prolonged inhalation or overexposure to dusts may cause irreversible lung damage.	Remove to fresh air. Seek medical attention.																																											
Ingestion:	May cause irritation of the digestive tract.	Seek immediate medical attention. Give one to two glasses of water or milk.																																											
Note:																																													
SECTION 5: FIRE FIGHTING MEASURES					SECTION 6: ACCIDENTAL RELEASE MEASURES																																								
<p>Ingredients are listed on the TSCA Inventory of Chemical Substances. Those not identified are non-hazardous.</p>					<p>Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical or water.</p> <p>Fire Fighting Instruction: Wear full protective clothing and OSHA/NIOSH self-contained breathing apparatus with full facepiece.</p> <p>Special Hazards: Product is non-combustible.</p>																																								
<p><b>HMIS Ratings</b>                      Health: 1                      Flammability: 0                      Reactivity: 0</p>					<p>Stop the flow of material. Wear appropriate protective equipment and clothing during clean-up. Absorb spill with inert material. Shovel material into appropriate disposal.</p>																																								
Page 1 of 2:																																													

<p><b>SECTION 7: HANDLING &amp; STORAGE</b></p>	<p><b>SECTION 12: ECOLOGICAL INFORMATION</b></p>
<p>Handling: Avoid contact with skin and eyes. Observe good housekeeping practices.</p> <p>Storage: Store in tightly closed original container in a cool, well-ventilated place away from incompatible materials. Keep from freezing.</p>	<p>Mobility: This product is water soluble and may spread in water systems.</p> <p>Degradability: The degradability of the product has not been stated.</p> <p>Ecotoxicity: The product is not expected to be hazardous to the environment.</p>
<p><b>SECTION 8: EXPOSURE CONTROL &amp; PERSONAL PROTECTION</b></p>	<p><b>SECTION 13: DISPOSAL INFORMATION</b></p>
<p>Engineering Measures: Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.</p> <p>Respiratory Protection: Use OSHA/NIOSH approved respiratory protection if level of air contaminants is excessive.</p> <p>Protective Gloves: Use impervious gloves.</p> <p>Eye Protection: Safety glasses or chemical splash goggles.</p> <p>Other: Eyewash, safety shower and impervious clothing are recommended.</p>	<p>Dispose of waste material according to Federal, State and Local regulations. Dispose of contaminated packaging as residue.</p>
<p><b>SECTION 9: PHYSICAL &amp; CHEMICAL PROPERTIES</b></p>	<p><b>SECTION 14: TRANSPORT INFORMATION</b></p>
<p>Appearance: White liquid                  Odor: None                  Solubility: Dispersible                  Boiling Point: 212°F (100°C)                  Melting Point: 32°F (0°C)                  Flash Point: NA                  Vapor Pressure: NA                  Vapor Density: NA                  Evaporation Rate: NA                  Specific Gravity: NA                  Flammable Limits LEL: NA                  Flammable Limits UEL: NA</p> <p>Particle Size: .28µ                  Solids (Means): 22%                  PH: ~4 (acidic)</p>	<p>Non hazardous as defined by DOT, nor is it a dangerous good as defined by ICAO for air transportation.                  Product is not regulated by DOT or IATA.</p>
<p><b>SECTION 10: STABILITY &amp; REACTIVITY</b></p>	<p><b>SECTION 15: REGULATORY INFORMATION</b></p>
<p>Stability: Stable</p> <p>Conditions to Avoid/Incompatibles: None specific.</p> <p>Decomposition Products: None specific.</p> <p>Hazardous Polymerization: Will not occur.</p>	<p>Precautionary Label: Do not freeze.</p>
<p><b>SECTION 11: TOXICOLOGICAL INFORMATION</b></p>	<p><b>SECTION 16: OTHER INFORMATION</b></p>
<p>NA</p>	<p><b>Legend</b>                  NAIF: No Applicable Information Found                  NA: Not Available/Applicable                  NE: None Established</p> <p><b>DISCLAIMER:</b> The above information and recommendations are believed accurate and reliable. Because it is not possible to anticipate all conditions of use, additional safety precautions may be required. ALLIED HIGH TECH PRODUCTS, INC. makes no warranty, either express or implied, as to its accuracy or completeness and none is made as to the fitness of this material for any purpose. The manufacturer/distributor shall not be liable for damages to person or property resulting from its use. Nothing herein shall be construed as a recommendation for use in violation of any patent.</p> <p>Form Prepared By: Allied High Tech Products, Inc.</p>