

# MATERIAL SAFETY DATA SHEET

MSDS No. : 241-08800-98

Creation/Revision Date : Dec. 21, 2012

Identification of Substance :	<ul style="list-style-type: none"> <li>• Product details :                             <ul style="list-style-type: none"> <li>Trade name : Ampdirect<sup>®</sup> Plus</li> </ul> </li> <li>• Manufacturer/Supplier :                             <ul style="list-style-type: none"> <li>Manufacturer's name : SHIMADZU CORPORATION</li> <li>Division : Analytical &amp; Measuring Division</li> <li>Address : 1, Nishinokyo-Kuwabaracho, Nakagyo-ku, Kyoto 604-8511, Japan</li> </ul> </li> <li>• Emergency Tel :                             <ul style="list-style-type: none"> <li>Tel : +81-(0)75-823-1351, Fax : +81-(0)75-823-1364</li> </ul> </li> <li>• MSDS No. : 241-08800-98</li> </ul>		
Composition Information on Ingredients :	<ul style="list-style-type: none"> <li>• Chemical characterization :                             <ul style="list-style-type: none"> <li>Tris-HCl(≤5%)</li> <li>KCl(≤5%)</li> <li>MgCl<sub>2</sub>(≤5%)</li> </ul> </li> </ul>		
Hazards Identification :	<ul style="list-style-type: none"> <li>• Hazard description : Not applicable</li> </ul>		
First Aid Measures :	<ul style="list-style-type: none"> <li>• After contact with eyes : Rinse opened eyes for 15 minutes under running water. Then take medical treatment.</li> <li>• After contact with skin : Immediately wash with water.</li> <li>• After inhalation : Blow your nose and gargle immediately. Then move into fresh air and keep calm.</li> <li>• After ingestion : Drink a large amount of water. Then take medical treatment.</li> </ul>		
Fire Fighting Measures :	<ul style="list-style-type: none"> <li>• Extinguishing agents                             <ul style="list-style-type: none"> <li>Water spray</li> <li>Dry powder</li> <li>Carbon Dioxide</li> </ul> </li> </ul>		
Accidental Release Measures :	<ul style="list-style-type: none"> <li>• Measures for cleaning/collecting :                             <ul style="list-style-type: none"> <li>Gather and store in a vacant container as much as possible for reclamation or later disposal.</li> <li>Residue should be clean up by a mop.</li> </ul> </li> </ul>		
Handling and Storage :	<ul style="list-style-type: none"> <li>• Handling : Avoid contacting with eyes and skin.</li> <li>• Storage : -20°C</li> </ul>		
Exposure Controls and Personal Protection :	<ul style="list-style-type: none"> <li>• Personal protection equipment                             <ul style="list-style-type: none"> <li>For eyes : Safety goggles</li> <li>For hands : Appropriate gloves</li> <li>For skin and body : Appropriate apron and jacket</li> </ul> </li> </ul>		
Physical and Chemical Properties :	<ul style="list-style-type: none"> <li>• Form : Liquid solution</li> <li>• Color : Colorless</li> <li>• Boiling point : 100°C</li> <li>• Melting point : 0°C</li> <li>• Solubility in water : Fully miscible</li> </ul>	<ul style="list-style-type: none"> <li>• Volatiles : Undetermined</li> <li>• Vapor pressure : Undetermined</li> <li>• Specific gravity : Undetermined</li> </ul>	
Stability and Reactivity :	<ul style="list-style-type: none"> <li>• Flash point : Not applicable</li> <li>• Ignition Temperature : Not applicable</li> <li>• Ignitability : None</li> </ul>	<ul style="list-style-type: none"> <li>• Oxidation reactivity : None</li> <li>• Selfreactivity, Explosion : None</li> <li>• Dust explosion : None</li> </ul>	
Ecological Information :	<ul style="list-style-type: none"> <li>• Fish toxicity : Not tested</li> <li>• Degradative : Not tested</li> <li>• Accumulative : Not tested</li> </ul>		
Toxicological Information :	<ul style="list-style-type: none"> <li>• Corrosivity : Not tested</li> <li>• Irritation(skin, eyes) : Not tested</li> <li>• Acute Toxicity : Not tested</li> <li>• Subacute Toxicity : Not tested</li> <li>• Chronic toxicity : Not tested</li> <li>• Cancerous : Not tested</li> <li>• Mutagenicity : Not tested</li> </ul>	<ul style="list-style-type: none"> <li>• Sensitization : Not tested</li> <li>• Reproductive toxicity : Not tested</li> <li>• Teratogenicity : Not tested</li> </ul>	
Disposal Considerations :	Dispose of with a large amount of water.	Transport Consideration :	Avoid falling not to damage the container.
Regulations :	Japan None of the ingredients is listed		

\* This information is based on our present knowledge, and presented as reference information for safety use.

Therefore, this shall not constitute a guarantee for any specific product features.

\* This product may present unknown hazards and should be used with caution.