

## Safety Data Sheet

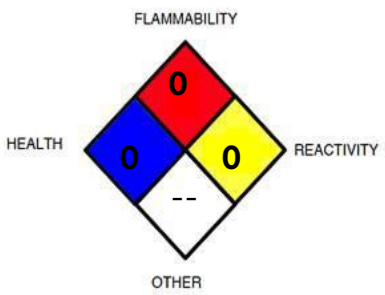
### Section 1: Product & Company Identification

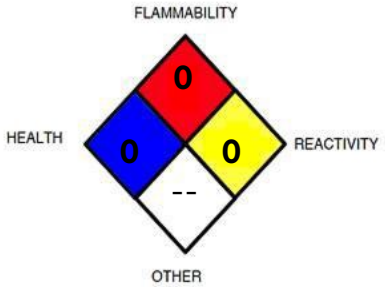
<b>Product Name:</b>	HEPES Buffered Saline Solution 2X
<b>Product #:</b>	H-2430
<b>Synonyms:</b>	-
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	%	HCS Classification
HEPES	7365-45-9	N/A	N/A	N/A
Water	7732-18-5	N/A	N/A	N/A
Dextrose	50-99-7	N/A	N/A	N/A
Sodium Phosphate Dibasic	7558-79-4	N/A	N/A	N/A
KCl	7447-40-7	N/A	N/A	N/A
NaCl	7647-14-5	N/A	N/A	N/A

### Section 3: Hazards Identification

<b>Symbols</b>	N/A
<b>HMIS Classification</b>	

<b>NFPA Classification</b>	 <p>The diagram is a diamond-shaped hazard diamond. The top vertex is red and contains the number '0'. The left vertex is blue and contains the number '0'. The right vertex is yellow and contains the number '0'. The bottom vertex is white and contains two dashes '--'. The diamond is labeled with 'FLAMMABILITY' at the top, 'HEALTH' on the left, 'REACTIVITY' on the right, and 'OTHER' at the bottom.</p>
----------------------------	--

## Section 4: First Aid Measures

<b>General Overview:</b>	Avoid contact, wear suitable protective clothing, gloves and eye/face protection.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration, seek medical attention.
<b>Skin:</b>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Eyes:</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
	See section 11 for more detailed information on health effects & symptoms

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	May be combustible at high temperature.
<b>Extinguishing Media:</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam, dry chemical or carbon dioxide. Do not use water jet.
<b>Hazardous thermal (de)composition products:</b>	These products are nitrogen oxides (NO, NO <sub>2</sub> ...).
<b>Special Fire Fighting Procedures:</b>	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use an approved/certified respirator or equivalent.
<b>Flash Point:</b>	N/A




## Section 6: Accidental Release Measures


<b>Personal Precautions:</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Environmental Precautions:</b>	Do not let product enter drains.
<b>Methods for Clean-up:</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep away from direct sunlight. Store at 2-8°C
<b>Handling:</b>	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>If exposure limit reached use ventilation system when handling or wear appropriate government (NIOSH/MSHA) approved respirator.</p>
<b>Skin and Body:</b>	  <p>Chemical-resistant gloves and lab coat/other protective clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.</p>
<b>Eyes:</b>	

	 <p>Safety goggles.</p>
<b>Ventilation/Engineering Measures:</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Hygiene:</b>	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
<b>Other:</b>	N/A

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Colorless clear liquid
<b>Formula</b>	N/A
<b>Molecular Wt.</b>	N/A
<b>Melting Pt.</b>	N/A
<b>Boiling Pt.</b>	N/A
<b>Density:</b>	N/A
<b>Vapor Pressure:</b>	N/A
<b>Evaporation Rate:</b>	N/A
<b>Vapor Density:</b>	N/A
<b>Solubility:</b>	Water
<b>Flash Point:</b>	N/A
<b>Autoignition Temp:</b>	N/A

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under proper storage conditions.
<b>Hazardous decomposition products:</b>	N/A
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	Not available.

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	N/A
<b>CHRONIC Toxicity:</b>	Repeated or prolonged exposure is not known to aggravate medical condition.
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	N/A

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	N/A
<b>Mobility:</b>	N/A
<b>Persistence and degradability:</b>	N/A
<b>Bioaccumulative potential:</b>	N/A
<b>Other adverse effects:</b>	N/A
<b>Corrosivity Characteristic:</b>	N/A
<b>General Notes:</b>	Do not allow undiluted product or large quantities of it to reach groundwater, water course or sewer system. Do not allow materials to be released into the environment without proper government permits.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	<b>Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial or state and local regulations.</b>
<b>Contaminated Packaging:</b>	Do not re-use empty containers. Dispose of as unused product.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not shipping hazard
<b>DOT regulations:</b>	Not shipping hazard
<b>IMDG/IMO (SEA):</b>	Not shipping hazard
<b>IATA/DGR (AIR):</b>	Not shipping hazard
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	N/A
<b>Risk Phrases:</b>	N/A
<b>Safety Phrases:</b>	N/A
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA. No products were found. California Proposition 65: This product does not contain any Proposition 65 chemicals.
<b>U.S. Federal Regulations:</b>	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: No products were found.
<b>WHMIS (Canada):</b>	CLASS D-1B: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. A.G. Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. A.G. Scientific products are for research purposes only. Not for human use or consumption.*