

**FAB 10 ENVIRONMENTAL HEALTH & SAFETY
INDUSTRIAL HYGIENE
MATERIAL SAFETY DATA SHEET
EURO FORMAT**

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1	Identification of substance (as per label):	GlobalTech AquaSonic® Aqueous Cleaner <i>for</i> Solder Paste & Flux (AQP) <i>Date of Last Revision:</i> 4/1/01
1.2	Company Name: Full Address: Web Site: www.jnj-industries.com E Mail: sales@jnj-industries.com Telephone Number: Fax Number: Emergency Number:	JNJ Industries Inc. 290 Beaver Street Franklin, MA 02038 (508) 553-0529 (508) 553-9973 NA: NONHAZARDOUS, LOW-TOXICITY, NON-CAUSTIC

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER	INGREDIENTS	0%	SYMBOLS	RISK PHASE
Trade Secret*	*A proprietary Oxygen and Sulfur containing compound with a maximum of 10.9% solids	<10%		N/E
7732-18-5	DI Water	>80%	HmOp	N/E

2.1	Substances presenting a health hazard:	None - Per OSHA 29 CFR 1910.1000 and OSHA 29 CFR 1910.1200
2.2	Exposure Limit Value:	Prolonged exposure found not harmful to humans
2.3	If substance is confidential-indicate chemical nature to ensure safe handling:	A proprietary Oxygen and Sulfur containing compound with a maximum of 10.9% solids

3. HAZARDS IDENTIFICATION

3.1	Critical Hazards:	None - Per OSHA 29 CFR 1910.1000 and OSHA 29 CFR 1910.1200
3.2	Critical Hazards to Man & Environment: Adverse Human Health Effects and Symptoms:	Hazard Rating: Toxicity: 1, Fire: 0, Reactivity: 0 NFPA & HMIS rating - Personal Protection B Refer to Section 11 - Toxicological Information

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1. FIRST AID MEASURES

4.1	<p>Skin Contact: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Eye Contact: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Inhalation: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Ingestion: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Immediate Treatment Available at Workplace:</p>	<p>Wash with mild soap and water Irritation or redness None No prolonged effects None - consult with doctor if irritation persists</p> <p>May be Irritating to eyes Flush with water Irritation may cause eye reddening None No prolonged effects None - consult with doctor if irritation persists</p> <p>N/E - No VOC fumes</p> <p>No effects expected</p> <p>DO NOT induce vomiting - Give large amounts of water or milk None None If a reaction to exposure persists, promptly seek medical attention (Refer to Corporate First Aid Policy)</p>
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2. FIRE FIGHTING MEASURES

5.1	Suitable Extinguishing Media:	NOT FLAMMABLE - Water composition and will not support combustion
5.2	Unsuitable Extinguishing Media:	N/A
5.3	Exposure Hazards:	N/A
5.4	Combustion Products: Resulting Gases:	Sulfur Oxides, Ammonia, Nitrogen Oxides under fire conditions
5.5	Protective Equipment for Firefighters:	No special garments required

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1. ACCIDENTAL RELEASE MEASURES

<p>6.1</p> <p>6.2</p> <p>6.3</p> <p>6.4</p>	<p>Personal Precautions: Ignition Sources:</p> <p>Provisions for sufficient ventilation: Control of dust: Prevention of skin contact: Prevention of eye contact:</p> <p>Environmental Precautions:</p> <p>Methods for Cleaning Up: (List materials for)</p> <p>Materials not to be Used for Cleaning Up:</p>	<p>No requirements necessary</p> <p>No requirements necessary No requirements necessary Gloves recommended - not required Safety glasses/goggles recommended</p> <p>Product is Non-Toxic, Non-Caustic and Non-Hazardous. Product is biodegradable and can be sewer or surface water discharged. HOWEVER, treatment, containment and disposal of all effluents and other wastes should be done in accordance with local and national ordinances.</p> <p>No requirements necessary. Simply rinse with water.</p> <p>N/A</p>
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2. HANDLING & STORAGE

<p>7.1</p> <p>7.2</p>	<p>Handling:</p> <p>3. General Rules:</p> <p>4. Technical Precautions for Safe Handling:</p> <p>5. Measure necessary to prevent air levels of chemical being generated as a result of handling:</p> <p>Recommended Storage Conditions:</p> <p>6. List Incompatible Materials:</p> <p>7. Quantity Limits for Storage:</p> <p>8. Special Requirements for proper storage of chemical:</p>	<p>Avoid extended skin & eye contact</p> <p>No special handling required</p> <p>No special handling required</p> <p>Store in a dry, cool area. Indefinite shelf life.</p> <p>N/E</p> <p>N/E</p> <p>Store at 40° - 130°F</p>
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1. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	<p><u>System Design:</u> (e.g. Fume Hoods, Ventilation Cabinets, Enclosure)</p>	<p>No special ventilation required</p>
8.2	<p><u>Control Parameters:</u> Limit Values or Biological Standards:</p>	<p>N/E</p>
8.3	<p><u>Recommended Monitoring Procedures:</u></p>	<p>N/A</p>
8.4	<p><u>Personal Protection</u></p> <p><i>Respiratory Protection:</i></p> <p><i>Hand Protection:</i></p> <p><i>Eye Protection:</i></p> <p><i>Skin Protection:</i></p>	<p>Not required</p> <p>Gloves recommended, not required</p> <p>Safety glasses/goggles recommended</p> <p>No special garments required</p>
8.5	<p>CEN Standards:</p>	<p>N/E</p>

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2. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Appearance:	Brown non-viscous liquid
9.2	Odor:	Slight soap-like odor
9.3	P.H.:	12.5 +/- .5
9.4	Boiling Point:	100° C
9.5	Melting Point/Freezing Point:	0° C
9.6	Flash Point:	Water composition and will not support combustion
9.7	Flammability: (solid gas)	NOT FLAMMABLE
9.8	Auto flammability:	Will not occur
9.9	Explosive Properties:	None
9.10	Oxidizing Properties:	None
9.11	Vapor Pressure:	Same as Water
9.12	Liquid Density:	1 g/cc
9.13	Solubility:	
	1. Water Solubility:	Completely soluble in water
	2. Fat Solubility:	N/E
9.14	Partition coefficient, n-octanol/water:	N/E
9.15	Other Data:	
	3. Safety Parameters:	N/E
	4. Vapor Density:	Same as water
	5. Miscibility:	Completely soluble in water
	6. Evaporation Rate:	Negligible
	7. Conductivity:	N/E
	8. Viscosity:	N/E

3. STABILITY AND REACTIVITY

10.1	Stability:	Stable
10.2	Conditions to Avoid:	N/A
	9. Effects:	
10.3	Materials to Avoid:	None
	10. Effects:	
10.4	Hazardous Decomposition Products:	
	11. The need for and the presence of stabilizers:	None
	12. Hazardous exothermic reaction:	Sulfur Oxides, Ammonia & Nitrogen Oxides under fire conditions
	13. Change appearance in the substance:	None
	14. Hazardous products formed upon contact with water:	None
	15. Possible degradation to unstable products:	None

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2. TOXICOLOGICAL INFORMATION

Toxicological tests performed by Product Safety Labs (psl) on 11/98.

<p>11.1</p>	<p>Skin Exposure: 1. Symptoms: 2. Immediate Effects: 3. Delayed Effects: 4. Chronic Effects: 5. Special Health Effects:</p>	<p>Not considered to be a skin irritant. Study #6448 - Primary Skin Irritation The average Primary Dermal Irritation Index of 0.4 indicates slight irritation, which cleared within 48 hours. Based on Consumer Product Safety Commission guidelines, GlobalTech AquaSonic® concentrate is not considered to be a skin irritant. Study #6501 - P328 Dermal Sensitization (Buehler) The test results indicate the GlobalTech AquaSonic® concentrate is not a contact sensitizer. This indicates the product would not produce skin sensitization with repeated use.</p>
<p>11.2</p>	<p>Eye Contact: 6. Symptoms: 7. Immediate Effects: 8. Delayed Effects: 9. Chronic Effects: 10. Special Health Effects:</p>	<p>Not considered to be a eye irritant. Study #6447 - Primary Eye Irritation The average irritation score of 0.7 at 24 hours indicates a classification of "Practically Non-Irritating" according to Kay JH, and Calandra JC, <i>J. Soc. Cos. Chem.</i> 1962; 13:281-289. Based on Consumer Product Safety Commission guidelines, GlobalTech AquaSonic® concentrate is not considered to be an eye irritant.</p>
<p>11.3</p>	<p>Inhalation: 11. Symptoms: 12. Immediate Effects: 13. Delayed Effects: 14. Chronic Effects: 15. Special Health Effects:</p>	<p>No effects - no VOC fumes.</p>
<p>11.4</p>	<p>Ingestion: 16. Symptoms: 17. Immediate Effects: 18. Delayed Effects: 19. Chronic Effects: 20. Special Health Effects:</p>	<p>Considered NON-TOXIC. Study #6446 - Acute Oral Toxicity Test The results of this test indicate the Acute Oral LD₅₀ for GlobalTech AquaSonic® concentrate is greater than 5,000 mg/kg. Based on this finding, GlobalTech AquaSonic® concentrate can be considered non-toxic.</p>

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2. ECOLOGICAL INFORMATION

<p>12.1</p>	<p>Mobility: 1. Distribution to environmental compartments: 2. Surface tension: 3. Absorption / desorption: 4. Physical & chemical properties:</p>	<p>N/E N/E N/E N/E</p>
<p>12.2</p>	<p>Degradability: 5. Biotic and abiotic degradation: 6. Acrobic and anaerobic degradation: 7. Persistence:</p>	<p>Considered Biodegradable</p>
<p>12.3</p>	<p>Accumulation: 8. Bioaccumulation potential: 9. Biomagnification:</p>	<p>None</p>
<p>12.4</p>	<p>Short and Long Term Effects on: 10. Ecotoxicity: 11. aquatic organisms: 12. soil organisms: 13. plants and terrestrial animals: 14. Other Adverse Effects: 15. ozone depletion potential: 16. photochemical ozone creation potential: 17. effects on waste water treatment plants:</p>	<p>N/E No ozone depleting compounds None N/E</p>

3. DISPOSAL CONSIDERATIONS

<p>13.1</p>	<p>Safe Handling:</p>	<p>No handling requirements once separated from contaminant.</p>
<p>13.2</p>	<p>Methods of Disposal:</p>	<p>In case of spill or leak, AquaSonic® should be diluted with copious amounts of water. It is biodegradable and can be sewer or surface water discharged.</p>
<p>13.3</p>	<p>Community Provisions, National or Regional Provisions:</p>	<p>Treatment, containment and disposal of all effluents and other wastes should be done in accordance with local and national ordinances.</p>

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1. TRANSPORT INFORMATION

14.1	UN Nr:	N/A Non-Hazardous, Non-Toxic, Non-Caustic
14.2	UK Road & Sea Freight (IMO) Classification:	N/E
14.3	Substance Classification Number:	N/E
14.4	Class:	N/E
14.5	Packing Group:	N/E
14.6	Proper Shipping Name: PGR (if applicable)	N/E
14.7	ADR/RID CLASSIFICATION: Class: Item Number:	N/E
14.8	ICAO/IATA CLASSIFICATION: Class: Sub-Risk: Packing Group: Proper Shipping Name:	N/A Non-Hazardous, Non-Toxic, Non-Caustic

2. REGULATORY INFORMATION

15.1	Precautionary Label Information:	Non-Hazardous, Non-Toxic, Non-Caustic
15.2	Symbols:	N/E
15.3	Risk Phases:	N/E
15.4	Safety Phases:	N/E

3. OTHER INFORMATION

16.1	Regulatory Information:	N/E
16.2	Training Necessary:	N/A
16.3	Reissue Date / Reason for Reissue:	N/A
16.4	Intended Use of Product:	Cleaning Compound
16.5	Limitations on Use of Product:	N/A

N/A = Not Applicable
N/E = Not Established