



# Safety Data Sheet

Issue Date: 15-Jan-2014

Revision Date: 07-Mar-2014

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Challenge 807-S

### Other means of identification

**SDS #** IDI-807S

### Recommended use of the chemical and restrictions on use

**Recommended Use** Neutral pH ultrasonic/megasonic detergent.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Intersurface Dynamics, Inc.  
21 F.J. Clarke Circle  
P.O. Box 181  
Bethel, CT 06801

### Emergency Telephone Number

**Company Phone Number** Phone: 203-778-9995  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear colorless to slight amber liquid      **Physical State** Liquid      **Odor** Mild sweet

### Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Tetrapotassium pyrophosphate	7320-34-5	<5
Citric Acid	77-92-9	<1.5

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST-AID MEASURES**

**First Aid Measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash with soap and water. Apply hand cream. Take off contaminated clothing.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Immediately drink 1-2 glasses of milk or water. Seek medical attention. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects**

<b>Symptoms</b>	Contact with eyes may cause slight transient irritation seen as excessive redness. If ingested, severe exposure may cause nausea and gastrointestinal discomfort. Preexisting skin condition may promote irritation.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Non-flammable solution.

**Hazardous Combustion Products** Carbon oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	Use personal protective equipment as required.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-Up</b>	Contain and collect with an inert absorbent and place into an appropriate container for disposal.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling**            Avoid prolonged contact with eyes, skin, and clothing.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**            Keep container sealed in storage. Protect from freezing. Keep away from incompatible materials, extreme heat or open flame.

**Incompatible Materials**        Strong oxidizers. Strong reducing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-

**Appropriate engineering controls**

**Engineering Controls**            Eyewash stations. Showers.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**            Splash goggles or safety glasses.

**Skin and Body Protection**      Use impervious gloves. Wear impervious clothing.

**Respiratory Protection**        Ensure adequate ventilation, especially in confined areas.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Mild sweet
<b>Appearance</b>	Clear colorless to slight amber liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Colorless to slight amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.6	
Melting Point/Freezing Point	Not established	
Boiling Point/Boiling Range	Not established	
Flash Point	Non-flammable	
Evaporation Rate	< water	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	Not established	
Vapor Density	Not established	
Specific Gravity	1.05	
Water Solubility	Soluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not applicable	

<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not an explosive
<b>Oxidizing Properties</b>	Not determined
<b>VOC Content (%)</b>	<0.13%
<b>Bulk Density</b>	1050g/L

**10. STABILITY AND REACTIVITY**

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**

Hazardous polymerization does not occur.

**Conditions to Avoid**

Incompatible Materials. Extreme heat and open flames.

**Incompatible Materials**

Strong oxidizers. Strong reducing agents.

**Hazardous Decomposition Products**

Carbon oxides.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

**Eye Contact**

May cause transient eye irritation seen as excessive redness.

**Skin Contact**

Prolonged and repeated exposure of unprotected skin may cause irritation.

**Inhalation**

Exposure to mist may cause mild nasal and throat irritation.

**Ingestion**

Do not taste or swallow. Severe exposure may cause nausea and gastrointestinal discomfort.

**Component Information**

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Tetrapotassium pyrophosphate 7320-34-5	-	> 4640 mg/kg ( Rabbit )	-
Citric Acid 77-92-9	= 3000 mg/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects**

**Symptoms**

Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity**

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

This preparation is considered to have low toxicity to aquatic and estuarine species.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Tetrapotassium pyrophosphate 7320-34-5		100: 96 h Oncorhynchus mykiss mg/L LC50		100: 48 h water flea mg/L EC50
Citric Acid 77-92-9		1516: 96 h Lepomis macrochirus mg/L LC50 static		120: 72 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Readily biodegradable. COD of preparation at 4% solution: 5530 +/- mg/L, EPA Method 410.4.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Citric Acid 77-92-9	-1.72

**Other Adverse Effects**

None known

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Tetrapotassium pyrophosphate	Present	X		Present		Present	X	Present	X	X
Citric Acid	Present	X		Present		Present	X	Present	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** Yes

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	0	None
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	0	0	A

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**