



# MATERIAL SAFETY DATA SHEET

Date Prepared: 12/16/2010  
 Supersedes Date: 05/28/2009

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **EGY-C603**

Chemical Family: Surfactant mixture; fire fighting foam concentrate

Company Identification: International Security & Safety Systems Co.  
 49, Abbas AL-Akkad, Nasr City  
 Cairo, Egypt  
 (202) 24017430 (For Product Information)  
 (202) 22602808 (For Emergency Information)  
[www.issystems.com](http://www.issystems.com)

**For a transport accident or leak, fire or major spill, call CHEMTREC, (800) 424-9300  
 For International CHEMTREC assistance, call: (703) 527-3887 (collect calls accepted)**

**Read the entire MSDS for a complete hazard assessment.**

2. COMPOSITION / INFORMATION ON INGREDIENTS

**CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS**

<u>Chemical Name</u>	<u>Percentage</u>	<u>CAS Number</u>	<u>OSHA Hazard</u>
Water	87-95%	7732-18-5	NO
Magnesium sulfate	1 - 2%	7487-88-9	YES
Proprietary hydrocarbon solvent	---	---	Yes
Proprietary hydrocarbon surfactant	---	---	YES
Proprietary fluorosurfactant	---	---	YES

COMPOSITION NOTES:

3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**  
**WARNING! MAY CAUSE EYE AND/OR SKIN IRRITATION**

**Routes of Exposure:**

**Eye Contact:** Exposure during the handling or mixing may cause immediate or delayed irritation or inflammation.

**Skin Contact:** Exposure during the handling or mixing may cause immediate or delayed irritation or inflammation.

**Ingestion:** Ingestion of large quantities may cause abdominal cramps, nausea, vomiting, diarrhea.

**Inhalation:** Exposure to this product in excess of the applicable TVL or PEL may cause or aggravate other lung conditions. Exposure to this product may cause irritation to the nose, throat, and upper respiratory system.

**Chronic:** None known

# EGY-C603

**Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure:** Persons with unusual (hyper) sensitivity to chemicals may experience adverse reactions to this product.

**Carcinogenic Potential:** This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

## 4. FIRST AID MEASURES

**Eyes:** Immediately flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids. Seek immediate medical attention.

**Skin:** In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation or redness occurs. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

**Ingestion:** If victim is conscious and alert, give 3 – 3 glasses of water to drink. Do not induce vomiting without medical advice. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

**Inhalation:** If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**Notes to Physician:** All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## 5. FIRE FIGHTING MEASURES

**Flash Point** – >160°F (71.11°C)

**Lower Explosive Limit** – Not Applicable

**Upper Explosive Limit** – Not Applicable

**Hazardous Combustion Products** – Oxides of nitrogen, sulfur and carbon

**Unusual Fire & Explosion Hazards** – Decomposition products may be toxic..

**Extinguishing Media** – Water, Foam, Carbon Dioxide, Dry Chemical, Halon

**Special fire fighting Procedures** – Self contained breathing apparatus

**Auto Ignition Temperature** – Not Applicable

## 6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective gear for the situation. See Personal Protection information in section 8.

**Containment of Spill:** Dike or retain dilution water or water from firefighting for later disposal. Follow procedure described below under cleanup and disposal of spills.

**Cleanup and Disposal of Spill:** Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of mist. Vacuum or sweep into an appropriate storage container. Absorb smaller quantities with absorbent materials and dispose of properly. Washing area with water will create large amounts of foam. Avoid creating mist. Ventilate area.

**Environmental and Regulatory Reporting:** Runoff from fire control or dilution water may cause pollution. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

# EGY-C603

## 7. HANDLING AND STORAGE

**Minimum/Maximum Storage Temperature:** Store at temperatures of 35°F - 120°F. If the material freezes, it may be thawed without loss of performance.

**Handling:** Avoid inhalation or contact with eyes, skin or clothing. Avoid prolonged or repeated exposure. Use with adequate ventilation.

**Storage:** Store in an area that is dry, well ventilated and in tightly closed containers, or appropriate end-use devices..

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure techniques may be used to effectively minimize employee exposures.

**Eye Protection:** When engaged in activities where product could contact the eye, wear safety glasses with side shields, goggles, or face shield.

**Skin Protection:** Skin contact should be minimized through use of latex gloves and suitable long sleeved clothing. Consideration must be given both to durability as well as permeation resistance.

**Respiratory Protection:** Avoid actions that cause dust exposure to occur. Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

**Ventilation:** Use local exhaust or general dilution ventilation to control exposure within applicable limits.

### **Work Practice Controls:**

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** – Clear amber liquid

**Odor** – Slight solvent odor

**Physical State** – Liquid

**Specific Gravity (H<sub>2</sub>O=1)** – 1.006 g/ml

**pH** – 7.0 – 8.5

**Vapor Pressure** – Not Evaluated

**Density** – Not evaluated

**Boiling Point** – 212° F (100° C)

**Melting Point** – 30° F (-1.1° C)

**Solubility in Water** – Soluble

## 10. STABILITY AND REACTIVITY

# EGY-C603

**Stability:** Stable.

**Conditions to avoid:** Unintentional contact with water.

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**Incompatibility with other materials:** Strong oxidizing agents

**Hazardous Decomposition:** Oxides of nitrogen, sulfur and carbon

## 11. TOXICOLOGICAL INFORMATION

### **Acute Eye and Skin Toxicity Data:**

Toxicological Information and Interpretation:

**Eye irritation (Rabbits):** Mild irritant

**Skin Irritation (Rabbit):** Minimal irritant

**Acute Oral Effects (Rats):** Not evaluated

**Inhalation Toxicity:** Not evaluated

**Sensitization:** Not evaluated

**Teratology:** Not evaluated

**Mutagenicity:** Not evaluated

**Reproduction:** Not evaluated

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

### **Chronic Toxicity:**

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

## 12. ECOLOGICAL INFORMATION

	<b>CONCENTRATE</b>	<b>SOLUTION (AS USED)</b>
<b>Chemical Oxygen Demand:</b>	105,000 mg/l	6,300 mg/l
<b>Biological Oxygen Demand (20 day):</b>	39,900 mg/l	2,358 mg/l
<b>Biodegradability (B.O.D/C.O.D.):</b>	38%	38%
<b>Total Organic Carbon:</b>	16,800 mg/l	1,008 mg/l
<b>LC50 (96 hour <i>Pimephales promelas</i>):</b>	466 ppm	7,767 ppm
<b>LC50 (48 hour <i>Daphnia magnas</i>):</b>	2,220 ppm	37,000 ppm

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal:** Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Dispose of waste material according to local, state and federal regulations.

## 14. TRANSPORTATION INFORMATION

### **Department of Transportation (DOT)**

**Hazardous Materials Description/Proper Shipping Name:** NOT REGULATED

**Hazard Class:** Not Applicable

# EGY-C603

**Identification Number:** Not Applicable

**Required Label Text:** Not Applicable

**Hazardous Substances/Reportable Quantities:** Not Applicable

**International Air Transport Association (IATA):** NOT REGULATED

## 15. REGULATORY INFORMATION

### **FEDERAL REGULATORY STATUS:**

**Status under OSHA Hazard Communication Standard, 29 CFR 1910.1200:** This product is considered a "hazardous chemical" under this regulation, and should be included in the employer's hazard communication program.

**Reportable Quantities Under the Clean Water Act, CERCLA, and EPCRA, 40 CFR 117, 302 and 355:**  
The product contains no component regulated under section 304 (40 CFR 370).

**Hazard Category and Applicability of EPCRA Hazardous Substance Inventory Reporting, 40 CFR 370:**  
Not listed

**Applicability of EPCRA Toxic Chemical Release Inventory (TRI) Reporting, 40 CFR 372:**  
Not subject to TRI reporting

**Status Under the Toxic Substances Control Act, 40 CFR 710:**  
All chemicals comprising this product are listed on the TSCA Inventory.

### **SARA Title III Hazard Classes:**

Fire Hazard: NO  
Reactive Hazard: NO  
Release of Pressure: NO  
Acute Health Hazard: YES  
Chronic Health Hazard: NO

### **State Regulations:**

#### **California:**

This product does not contain any components that are regulated under California Proposition 65.

#### **Pennsylvania Right To Know Components**

This product does not contain any components on the Pennsylvania Right to Know List

## 16. OTHER INFORMATION

**NFPA Ratings:** Health: 1 Flammability: 1 Reactivity: 0

### **Label Requirements:**

**WARNING! MAY CAUSE EYE AND/OR SKIN IRRITATION**

Hazardous Material Information System (HMIS):

**Health**

**1**

# EGY-C603

	<b>Flammability</b>	<b>1</b>
	<b>Reactivity</b>	<b>0</b>
	<b>Personal Protection</b>	<b>B</b>

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves

### ADDITIONAL INFORMATION:

The information contained in this document is given in good faith and based on our current knowledge. It is only an indication and is in no way binding, notably as regards infringement of, or prejudice to third parties through the use of our products. ISS guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for a given use. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorizations.

END OF MSDS