Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard (29CFR 1910.1200)

Product name ISS 3x6 AR-AFFF (EGY-C364)

1. Identification

1.1.**Product Identifier**

Product name	ISS 3x6 AR-AFFF (EGY-C364)

1.2. Other means of identification

Product code	770822
Synonyms	None
Chemical Family	No information available

1.3.**Recommended use of the chemical and restrictions on use**

Recommended use	Fire extinguishing agent.
Uses advised against	Consumer use.

1.4.**Details of the Supplier of the Safety Data Sheet**

Company Name	Int. Security&Safety Systems **49.Abbass EL Akaad St.** **Nasr city-CAIRO-EGYPT** Telephone: 002-02-22602808
Contact point	Product Manager
E-mail address	info@isssystems.com

2. Hazards Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation - Category 2A

2.2.**Label Elements**

Signal Word
WARNING

Hazard Statements
Causes serious eye irritation

Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

2.3.**Hazards Not Otherwise Classified (HNOC)**
Not Applicable.

2.4.**Other Information**
Unknown Acute Toxicity 12.0826% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

3.1.**Mixture**
The following component(s) in this product are considered hazardous under applicable OSHA(USA)

Chemical name	CAS No.	weight-%
2-(2-Butoxyethoxy)ethanol	112-34-5	5 - 10
Lauryl Imino Propionate, Sodium Salt	14960-06-6	1 - 5

4. First aid measures

4.1.**Description of first aid measures**

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).

Ingestion Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately.

4.2.**Most Important Symptoms and Effects, Both Acute and Delayed**
Symptoms No information available.

4.3.**Indication of Any Immediate Medical Attention and Special Treatment Needed**
Note to physicians Treat symptomatically.

5. Fire-fighting measures

5.1.**Suitable Extinguishing Media**
Product is extinguishing agent. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2.**Unsuitable Extinguishing Media**
None.

5.3.**Specific Hazards Arising from the Chemical**
None known.

Hazardous Combustion Products Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur

5.4.**Explosion Data**

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

5.5.**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.

6. Accidental release measures

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

Personal Precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

6.2.**Environmental Precautions**

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

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

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. Handling and Storage

7.1.**Precautions for Safe Handling**

Advice on safe handling Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

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

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure Controls/Personal Protection

8.1.**Control Parameters**

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL
2-(2-Butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-	-

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health

8.2.**Appropriate Engineering Controls**

Engineering controls	Showers Eyewash stations Ventilation systems.

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

Eye/Face Protection	Avoid contact with eyes. Tight sealing safety goggles.
Skin and Body Protection	Wear protective gloves and protective clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Ventilation	Use local exhaust or general dilution ventilation to control exposure with applicable limits

8.4.**General hygiene considerations**

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid		
Odor	Characteristic	**Color**	Yellow
Odor Threshold	No data available		

Property	**Values**	**Remarks • Method**
pH	7	
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Flash Point	No data available	
Evaporation Rate	No data available	
Flammability (solid, gas)	No data available	
Flammability limit in air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Specific gravity	No data available	
Water Solubility	No data available	
Solubility in Other Solvents	No data available	
Partition coefficient	No data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Kinematic viscosity	No data available	

Density 1.00

10. Stability and Reactivity

10.1. Chemical Stability

Stable under recommended storage conditions.

10.2.**Reactivity**
No data available

10.3.**Possibility of hazardous reactions**

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

10.4.**Conditions to Avoid**

Extremes of temperature and direct sunlight.

10.5.**Incompatible Materials**

Strong oxidizing agents. Strong acids. Strong bases.

10.6.**Hazardous decomposition products**

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Fluorinated oxides.

11. Toxicological Information

11.1. **Information on Likely Routes of Exposure**

Product information

Inhalation No data available.

Eye Contact Severely irritating to eyes.

Skin contact No data available.

Ingestion No data available.

Component Information
Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-Butoxyethoxy)ethanol 112-34-5	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-

11.2. **Information on Toxicological Effects**

Symptoms No information available.

11.3. **Delayed and immediate effects as well as chronic effects from short and long-term exposure** **Skin Corrosion/Irritation**
No information available.
Serious eye damage/eye irritation Severely irritating to eyes.
Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity No information available.
Reproductive Toxicity No information available.
STOT - Single Exposure No information available.
STOT - Repeated Exposure No information available.
Aspiration Hazard No information available.

11.4. **Numerical Measures of Toxicity - Product information**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	31439 mg/kg
ATEmix (dermal)	33954 mg/kg

12. Ecological Information

12.1. **Ecotoxicity**

0.009% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-(2-Butoxyethoxy)ethanol 112-34-5	EC50 (96h) > 100 mg/L Desmodesmus subspicatus	LC50 (96h) static = 1300 mg/L Lepomis macrochirus	EC50 (48h) > 100 mg/L Daphnia magna EC50 (24h) = 2850 mg/L Daphnia magna
n-Butanol 71-36-3	EC50 (72h) > 500 mg/L Desmodesmus subspicatus EC50 (96h) > 500 mg/L Desmodesmus subspicatus	LC50 (96h) static 1730 - 1910 mg/L Pimephales promelas LC50 (96h) flow-through = 1740 mg/L Pimephales promelas LC50 (96h) static = 1910000 µg/L Pimephales promelas LC50 (96h) static 100000 - 500000 µg/L Lepomis macrochirus	EC50 (48h) = 1983 mg/L Daphnia magna EC50 (48h) Static 1897 - 2072 mg/L Daphnia magna
Polyethylene Glycol 25322-68-3	-	LC50 (24h) > 5000 mg/L Carassius auratus	-
Sodium Hydrogen Carbonate 144-55-8	EC50 (120h) = 650 mg/L Nitzschia linearis	LC50 (96h) static 8250 - 9000 mg/L Lepomis macrochirus	EC50 (48h) = 2350 mg/L Daphnia magna
Hexamethylenetetramine 100-97-0	-	LC50 (96h) flow-through 44600 - 55600 mg/L Pimephales promelas	EC50 (48h) 29868 - 43390 mg/L Daphnia magna
Methylene chloride 75-09-2	EC50 (96h) > 500 mg/L Pseudokirchneriella subcapitata EC50 (72h) > 500 mg/L Pseudokirchneriella subcapitata	LC50 (96h) static 262 - 855 mg/L Pimephales promelas LC50 (96h) static = 193 mg/L Lepomis macrochirus LC50 (96h) flow-through = 193 mg/L Lepomis macrochirus LC50 (96h) flow-through 140.8 - 277.8 mg/L Pimephales promelas	EC50 (48h) Static 1532 - 1847 mg/L Daphnia magna EC50 (48h) = 190 mg/L Daphnia magna
1,3-Dichloropropene 542-75-6	EC50 (96h) 2.45 - 6.45 mg/L Pseudokirchneriella subcapitata EC50 (72h) 3.12 - 10.5 mg/L Pseudokirchneriella subcapitata	LC50 (96h) semi-static = 4.5 mg/L Oncorhynchus mykiss LC50 (96h) = 2 mg/L Oncorhynchus mykiss LC50 (96h) static 3.1 - 4.9 mg/L Oncorhynchus mykiss LC50 (96h) flow-through 0.211 - 0.271 mg/L Pimephales promelas LC50 (96h) static 1.52 - 2.68 mg/L Pimephales promelas LC50 (96h) static 5.1 - 6.8 mg/L Lepomis macrochirus	EC50 (48h) = 0.09 mg/L Daphnia magna EC50 (48h) Static 0.063 - 0.129 mg/L Daphnia magna

12.2. **Persistence and Degradability**

.

Chemical Oxygen Demand (mg/L)

Concentrate	250,000
3% Solution	7,300
6% Solution	14,000

Concentrate Biological Oxygen Demand (mg/L)

Biological Oxygen Demand (5 Day)	50000
%BOD/COD	20
Biological Oxygen Demand (10 Day)	150000
%BOD/COD	60
Biological Oxygen Demand (15 Day)	160000

%BOD/COD	64
Biological Oxygen Demand (20 Day)	180000
%BOD/COD	72

3% Solution Biological Oxygen Demand (mg/L)

Biological Oxygen Demand (5 Day)	1300
%BOD/COD	17.81
Biological Oxygen Demand (10 Day)	4300
%BOD/COD	58.90
Biological Oxygen Demand (15 Day)	4600
%BOD/COD	63.01
Biological Oxygen Demand (20 Day)	5100
%BOD/COD	69.86

6% Solution Biological Oxygen Demand (mg/L)

Biological Oxygen Demand (5 Day)	2800
%BOD/COD	20
Biological Oxygen Demand (10 Day)	8800
%BOD/COD	62.86
Biological Oxygen Demand (15 Day)	9600
%BOD/COD	68.57
Biological Oxygen Demand (20 Day)	11000
%BOD/COD	78.57

12.3. **Bioaccumulation**
No information available.

12.4. **Other Adverse Effects**
No information available

13. Disposal Considerations

13.1. **Waste Treatment Methods**

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

Contaminated Packaging Do not reuse container.

14. Transport Information

DOT NOT REGULATED

TDG NOT REGULATED

MEX NOT REGULATED

ICAO (air) NOT REGULATED

IATA NOT REGULATED

IMDG NOT REGULATED

15. Regulatory Information

15.1. **International Inventories**

TSCA	Complies
DSL/NDSL	Complies
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
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

15.2. US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
2-(2-Butoxyethoxy)ethanol - 112-34-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic health hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

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)

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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.3. US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Methylene chloride - 75-09-2	Carcinogen
1,3-Dichloropropene - 542-75-6	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-(2-Butoxyethoxy)ethanol 112-34-5	X	-	X

Hexamethylenetetramine 100-97-0	X	-	-
Methylene chloride 75-09-2	X	X	X
1,3-Dichloropropene 542-75-6	X	X	X

16. Other information, including date of preparation of the last revision

NFPA	**Health Hazards** 1	**Flammability** 0	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health Hazards** 1	**Flammability** 0	**Physical Hazards** 0	**Personal Protection** X

Revision date 13-Apr-2017
Revision note SDS sections updated, 12.
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