



Safety Data Sheet

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

Product name ISS 6% AFFF (EGY-C6B)

1. Identification

1.1. Product Identifier

Product name ISS 6% AFFF (EGY-C6B)

1.2. Other means of identification

Product code 770812
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@issystems.com

2. Hazards Identification

Classification

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.2. Label Elements

Hazard Statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Precautionary Statements

2.3. Hazards Not Otherwise Classified (HNOC)

Not Applicable.

2.4. Other Information

Unknown Acute Toxicity 4.1955% 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	1 - 5
Polyfluorinated alkyl polyamide	Proprietary	0.1 - 1

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	Color	Light yellow
Odor	Characteristic		
Odor Threshold	No data available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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	1.01	

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	No data available
Inhalation	No data available.
Eye Contact	No data available.
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)	-
Polyfluorinated alkyl polyamide	>2000 mg/kg	>2000 mg/kg	>5.11 mg/l

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	No information available.
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)	59588 mg/kg
ATEmix (dermal)	64355 mg/kg

12. Ecological Information

12.1. Ecotoxicity

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea

EGY-C6B



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
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Sodium Citrate 68-04-2	EC50 (96h) 18000 - 32000 mg/L Chlorella vulgaris	LC50 (96h) 18000 - 32000 mg/L Poecilia reticulata	EC50 (48h) 5600 - 10000 mg/L Daphnia magna
2-Methyl-2,4-pentanediol 107-41-5	-	LC50 (96h) flow-through = 8690 mg/L Pimephales promelas LC50 (96h) flow-through 10500 - 11000 mg/L Pimephales promelas LC50 (96h) static = 10000 mg/L Lepomis macrochirus LC50 (96h) static = 10700 mg/L Pimephales promelas	EC50 (48h) 2700 - 3700 mg/L Daphnia magna
t-Butanol 75-65-0	EC50 (72h) > 1000 mg/L Desmodesmus subspicatus	LC50 (96h) flow-through 6130 - 6700 mg/L Pimephales promelas	EC50 (48h) Static 4607 - 6577 mg/L Daphnia magna EC50 (48h) = 933 mg/L Daphnia magna
1-Octanol 111-87-5	EC50 (48h) static = 14 mg/L Desmodesmus subspicatus	LC50 (96h) static = 17.68 mg/L Oncorhynchus mykiss LC50 (96h) flow-through 11.4 - 12.9 mg/L Pimephales promelas	EC50 (24h) 15 - 26 mg/L Daphnia magna
4,4'-bis-(sulfostyryl)-biphenyl disodium salt 27344-41-8	EC50 (72h) = 10 mg/L Desmodesmus subspicatus EC50 (96h) 10.0 - 11.0 mg/L Desmodesmus subspicatus	LC50 (96h) static = 76 mg/L Brachydanio rerio	EC50 (48h) = 1000 mg/L Daphnia magna

Concentrate

Method Biological Test Method: Acute Lethality Using Threespine Stickleback (*Gasterosteus aculeatus*) (EPS 1/RM/10)
 Species *Gasterosteus aculeatus*
 Endpoint type LC50
 Effective dose 6780 mg/L
 Exposure time 96h

6% Solution

Method Biological Test Method: Acute Lethality Using Threespine Stickleback (*Gasterosteus aculeatus*) (EPS 1/RM/10)
 Species *Gasterosteus aculeatus*
 Endpoint type LC50
 Effective dose 113000 mg/L
 Exposure time 96h

Polyfluorinated alkyl polyamide					
Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	<i>Oncorhynchus mykiss</i> (rainbow trout)	LC50	>14 mg/l	96h	NOEC: 14 mg/L No toxic effects at saturation.
OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Algae	ErC50	>15 mg/l	72h	Growth rate >15, Yield 13. NOEC: 4.0 mg/L, LOEC: 8.5 mg/L
OECD Test No. 202: <i>Daphnia</i> sp., Acute Immobilization Test	<i>Daphnia magna</i>	EC50	>20 mg/l	48h	NOEC: 20 mg/L No toxic effects at saturation.

12.2. Persistence and Degradability

Chemical Oxygen Demand (mg/L)

Concentrate 100,000
 6% Solution 6,200

Concentrate Biological Oxygen Demand (mg/L)



Biological Oxygen Demand (5 Day)	10000
%BOD/COD	10
Biological Oxygen Demand (10 Day)	63000
%BOD/COD	63
Biological Oxygen Demand (15 Day)	69000
%BOD/COD	69
Biological Oxygen Demand (20 Day)	75000
%BOD/COD	75

6% Solution Biological Oxygen Demand (mg/L)

Biological Oxygen Demand (5 Day)	540
%BOD/COD	8.71
Biological Oxygen Demand (10 Day)	3700
%BOD/COD	59.68
Biological Oxygen Demand (15 Day)	4100
%BOD/COD	66.13
Biological Oxygen Demand (20 Day)	4900
%BOD/COD	79.03

12.3. Bioaccumulation

No information available.

12.4. Other Adverse Effects

No information available

13. Disposal Considerations

13.1.

Disposal of wastes

Waste Treatment Methods

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

Contaminated Packaging

Do not reuse container.

14. Transport Information

<u>DOT</u>	NOT REGULATED
<u>TDG</u>	NOT REGULATED
<u>MEX</u>	NOT REGULATED
<u>ICAO (air)</u>	NOT REGULATED
<u>IATA</u>	NOT REGULATED
<u>IMDG</u>	NOT REGULATED

15. Regulatory Information

15.1. International Inventories

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



PICCS Does not comply
AICS Does not comply

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	No
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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-(2-Butoxyethoxy)ethanol 112-34-5	X	-	X
2-Methyl-2,4-pentanediol 107- 41-5	X	X	X
t-Butanol 75-65- 0	X	X	X
1-Octanol 111-87-5	-	-	X

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



<u>NFPA</u>	Health Hazards 0	Flammability 0	Instability 0	Physical and chemical properties -
<u>HMIS</u>	Health Hazards 0	Flammability 0	Physical Hazards 0	Personal Protection X

Revision date 02-Mar-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