Safety Data Sheet

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

Product name ISS 3% FP (EGY-CFP3B)

1. Identification

1.1. **Product Identifier**

Product name ISS 3% FP (EGY-CFP3B)

1.2. Other means of identification

Product code 770844
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)

Skin Corrosion/Irritation - Category 2
Serious eye damage/eye irritation - Category 2A

2.2. **Label Elements**

Signal Word
WARNING

Hazard Statements
Causes skin irritation
Causes serious eye irritation

Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/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.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

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

2.4. **Other Information**
Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

Unknown Acute Toxicity 35.6% 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-Methyl-2,4-pentanediol	107-41-5	1 - 5
Sodium chloride	7647-14-5	1 - 5
Calcium Chloride	10043-52-4	1 - 5
Zinc chloride	7646-85-7	1 - 5
Cumene sulfonate, sodium salt	28348-53-0	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-Methyl-2,4-pentanediol 107-41-5	STEL: 50 ppm vapor fraction STEL: 10 mg/m³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	-	Ceiling: 25 ppm Ceiling: 125 mg/m³	25 ppm (Ceiling) 125 mg/m³ (Ceiling)
Zinc chloride 7646-85-7	STEL: 2 mg/m³ fume TWA: 1 mg/m³ fume	-	IDLH: 50 mg/m³ fume TWA: 1 mg/m³ fume STEL: 2 mg/m³ fume	TWA 1 mg/m³ (VLE-PPT) STEL 2 mg/m³(PPT-CT)

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 Ensure adequate ventilation, especially in confined areas.

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**	No data available
Odor Threshold	No data available		

Property	**Values**	**Remarks • Method**
pH	No data available	
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 1.12

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 Severely irritating to eyes.

Skin contact Irritating to skin.

Ingestion No data available.

Component Information
Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Methyl-2,4-pentanediol 107-41-5	= 3700 mg/kg (Rat)	= 8560 µL/kg (Rabbit)	> 310 mg/m³ (Rat) 1 h
Sodium chloride 7647-14-5	= 3 g/kg (Rat)	> 10 g/kg (Rabbit)	> 42 g/m³ (Rat) 1 h
Calcium Chloride 10043-52-4	= 1000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-

Zinc chloride 7646-85-7	= 1100 mg/kg (Rat)	-	-
Cumene sulfonate, sodium salt 28348-53-0	> 7000 mg/kg (Rat)	-	-

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

Severe skin irritation.

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.
Target organ effects Central Nervous System, Central Vascular System (CVS), Eyes, Respiratory System, Skin.
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) 18403 mg/kg
ATEmix (dermal) 75629 mg/kg

12. Ecological Information

12.1. **Ecotoxicity**

Harmful to aquatic life with long lasting effects.

0.663% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-Methyl-2,4-pentanediol 107-41-5	-	LC50 (96h) static = 10700 mg/L Pimephales promelas 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	EC50 (48h) 2700 - 3700 mg/L Daphnia magna
Urea 57-13-6	-	LC50 (96h) 16200 - 18300 mg/L Poecilia reticulata	EC50 (24h) > 10000 mg/L Daphnia magna Straus EC50 (48h) Static = 3910 mg/L Daphnia magna
Sodium chloride 7647-14-5	-	LC50 (96h) static = 12946 mg/L Lepomis macrochirus LC50 (96h) static 6020 - 7070 mg/L Pimephales promelas LC50 (96h) flow-through 5560 - 6080 mg/L Lepomis macrochirus LC50 (96h) static 6420 - 6700 mg/L Pimephales promelas LC50 (96h) semi-static = 7050 mg/L Pimephales promelas LC50 (96h) flow-through 4747 - 7824 mg/L Oncorhynchus mykiss	EC50 (48h) Static 340.7 - 469.2 mg/L Daphnia magna EC50 (48h) = 1000 mg/L Daphnia magna
Calcium Chloride 10043-52-4	-	LC50 (96h) static = 10650 mg/L Lepomis macrochirus	LC50 (48h) 2280000 - 3948000 µg/L Daphnia magna
Cumene sulfonate, sodium salt	EC50 (72h) > 1000 mg/L	-	EC50 (24h) > 1000 mg/L Daphnia

28348-53-0	Desmodesmus subspicatus		magna
Ferrous Chloride 7758-94-3	-	LC50 (96h) static = 4 mg/L Morone saxatilis	-
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
t-Butanol 75-65-0	EC50 (72h) > 1000 mg/L Desmodesmus subspicatus	LC50 (96h) flow-through 6130 - 6700 mg/L Pimephales promelas	EC50 (48h) = 933 mg/L Daphnia magna EC50 (48h) Static 4607 - 6577 mg/L Daphnia magna

12.2. **Persistence and Degradability**

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Chemical Oxygen Demand (mg/L)

Concentrate	460,000
3% Solution	12,000

Concentrate Biological Oxygen Demand (mg/L)

Biological Oxygen Demand (5 Day)	100000
%BOD/COD	21.74
Biological Oxygen Demand (10 Day)	230000
%BOD/COD	50
Biological Oxygen Demand (15 Day)	250000
%BOD/COD	54.35
Biological Oxygen Demand (20 Day)	270000
%BOD/COD	58.7

3% Solution Biological Oxygen Demand (mg/L)

Biological Oxygen Demand (5 Day)	2400
%BOD/COD	20
Biological Oxygen Demand (10 Day)	12000
%BOD/COD	60
Biological Oxygen Demand (15 Day)	13000
%BOD/COD	65
Biological Oxygen Demand (20 Day)	14000
%BOD/COD	70

12.3. **Bioaccumulation**

No information available.

Chemical name	Partition coefficient
2-Methyl-2,4-pentanediol 107-41-5	<0.14

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	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 %
Zinc chloride - 7646-85-7	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 contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc chloride 7646-85-7	1000 lb	X	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Zinc chloride 7646-85-7	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

15.3. US State Regulations

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-Methyl-2,4-pentanediol 107-41-5	X	X	X
Zinc chloride 7646-85-7	X	X	X
Ferrous Chloride 7758-94-3	X	X	X
t-Butanol 75-65-0	X	X	X

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

NFPA	**Health Hazards** 2	**Flammability** 0	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health Hazards** 2	**Flammability** 0	**Physical Hazards** 0	**Personal Protection** X

Revision date 05-Sep-2017
Revision note SDS sections updated, 2, 11, 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