



Safety Data Sheet

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

Product name ANSUL 3% FP (AFP3B)

1. Identification

1.1. Product Identifier

Product name ANSUL 3% FP (AFP3B)

1.2. Other means of identification

Product code 443361
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 Tyco Fire Protection Products
One Stanton Street
Marinette, WI 54143-2542
Telephone: 715-735-7411
Contact point Product Stewardship at 1-715-735-7411
E-mail address psra@tycofp.com

1.5. Emergency Telephone Number

Emergency telephone CHEMTREC 001-800-424-9300 or 001-703-527-3887

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





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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



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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 (NO_x), 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/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	-	Ceiling: 25 ppm Ceiling: 125 mg/m ³	25 ppm (Ceiling) 125 mg/m ³ (Ceiling)
Zinc chloride 7646-85-7	STEL: 2 mg/m ³ fume TWA: 1 mg/m ³ fume	-	IDLH: 50 mg/m ³ fume TWA: 1 mg/m ³ fume STEL: 2 mg/m ³ fume	TWA 1 mg/m ³ (VLE-PPT) STEL 2 mg/m ³ (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	Color	No data available
Odor	Characteristic		
Odor Threshold	No data available		

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



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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 (NO_x). 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	Irritating to skin.
Ingestion	No data available.



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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/m ³ (Rat) 1 h
Sodium chloride 7647-14-5	= 3 g/kg (Rat)	> 10 g/kg (Rabbit)	> 42 g/m ³ (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 component(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	-	LC50 (96h) static = 12946 mg/L	EC50 (48h) Static 340.7 - 469.2



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7647-14-5		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	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 28348-53-0	EC50 (72h) > 1000 mg/L Desmodemus subspicatus	-	EC50 (24h) > 1000 mg/L Daphnia 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 Desmodemus 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

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	<0.14



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107-41-5

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

<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 %
Zinc chloride - 7646-85-7	1.0



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SARA 311/312 Hazard Categories

Table with 2 columns: Hazard Category, Yes/No. Categories include Acute Health Hazard, Chronic health hazard, Fire Hazard, Sudden Release of Pressure Hazard, and Reactive Hazard.

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)

Table with 5 columns: Chemical name, CWA - Reportable Quantities, CWA - Toxic Pollutants, CWA - Priority Pollutants, CWA - Hazardous Substances. Row for Zinc chloride (7646-85-7).

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)

Table with 4 columns: Chemical name, Hazardous Substances RQs, CERCLA/SARA RQ, Reportable Quantity (RQ). Row for Zinc chloride (7646-85-7).

15.3. US State Regulations

U.S. State Right-to-Know Regulations

Table with 4 columns: Chemical name, New Jersey, Massachusetts, Pennsylvania. Rows for 2-Methyl-2,4-pentenediol, Zinc chloride, Ferrous Chloride, and t-Butanol.

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

Table with 5 columns: NFPA, HMIS, Health Hazards, Flammability, Instability, Physical and chemical properties, Personal Protection.

Revision date 13-Dec-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.

End of Safety Data Sheet