

1. CHEMICAL NAME AND COMPANY IDENTIFICATION

Formulated/Manufactured By: Tower Products, Inc.
2703 Freemansburg Avenue
Easton, PA 18045

Information Telephone Number: 1-800-527-8626 or 610-253-6206

For Chemical Spill Emergency Call: CHEMTREC 1-800-424-9300

Product Name: MILLENNIUM SF-PLUS

CAS Number: Mixture - Not Established

2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable Liquids (Category 4)
Skin Sensitizer (Category 1)
Skin Irritation (Category 2)
Eye Irritation (Category 2A)

GHS label elements, including hazard and precautionary statements

Pictogram(s)



Signal Word

WARNING!

Hazard statement(s)

H227: COMBUSTIBLE LIQUID.
H317: MAY CAUSE ALLERGIC SKIN REACTION.
H315: CAUSES SKIN IRRITATION.
H319: CAUSES SERIOUS EYE IRRITATION.

Precautionary statement(s)

Prevention:

P210: KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES AND OTHER IGNITION SOURCES.
NO SMOKING.
P261: AVOID BREATHING FUME/MIST/DUST/GAS/VAPORS/SPRAY.
P280: WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.
P264: WASH SKIN THOROUGHLY AFTER HANDLING.

Response:

P370+P378: IN CASE OF FIRE: USE WATER TO EXTINGUISH.
P302+P352: IF ON SKIN: WASH WITH PLENTY OF WATER.
P305+P351+P338: IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.

Storage:

P403+P233: STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED.

Disposal:

P501: DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL REGULATIONS.

HMIS Classification

Health Hazard: 1

Flammability: 2

Physical Hazard: 0

Personal Protection: B

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component(s)	CAS Number	*Concentration (weight)
Glycerin	56-81-5	10-20%
Propylene Glycol	57-55-6	5-15%
2-Butoxyethanol	111-76-2	5-10%
Sodium Nitrate	7631-99-4	1-5%
Acetic Acid	64-19-7	1-5%
Succinic Acid	110-15-6	1-5%
Proprietary Antimicrobial Blend	XXXXXX	1-5%
Malic Acid	6915-15-7	0.5-5%

* In accordance with paragraph (i) of §1910.1200, specific chemical identities and exact chemical percentages (concentration) of composition have been withheld as a trade secret.

4. FIRST AID MEASURES

Exposure Routes: Inhalation, Ingestion, Skin

Eye Contact: Flush with large volume of water for at least 15 minutes. Get immediate medical attention.

Inhalation: Remove to fresh air. Get immediate medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting.

Skin Contact: Flush area with large amounts of water for at least 15 minutes. Get immediate medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water.

Specific Hazards: Product containers may rupture from vapor pressure when exposed to heat from fire.

Special protective equipment for fire-fighters: Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions and protective equipment:

Respiratory Protection: Use supplied air equipment or respirators with proper NIOSH approved cartridges.

Protective Gloves: Impervious or chemical resistant gloves (consult safety equipment supplier).

Eye Protection: Chemical splash goggles recommended against potential eye contact.

Other Protective Clothing and Equipment: Safety shoes and aprons recommended.

Methods for Clean-Up:

Minor Spills: Absorb material with ground clay, vermiculite, sand, or similar absorbent material and place into containers for disposal according to local and/or state regulations.

Major Spills: Dike and contain spill. Eliminate potential sources of ignition, and shut off source of spill if possible. Remove liquid by chemical vacuum, absorbent material, or other safe and approved methods, and place into containers for disposal according to local and/or state regulations. Flush area with water to remove residue, and remove flushed solutions as above.

7. HANDLING AND STORAGE

Handling: Empty containers can be hazardous. Do not reuse containers. Plastic or stainless steel handling and transfer equipment recommended. Ground fixed equipment. Bond and ground transfer equipment and containers.

Storage: Store in a cool, dry, ventilated area, away from incompatible substances. Keep containers closed when not in use. Store between 50° and 100° F. Do not allow product to freeze.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines:		OSHA	ACGIH	ACGIH	OTHER
COMPONENT	CAS No.	PEL/TWA	TLV/TWA	TLV/STEL	RATING
Glycerin	56-81-5	10mg/m3	10mg/m3		
Propylene Glycol	57-55-6	N/E	N/E		10mg/m3(WEEL)
2-Butoxyethanol	111-76-2	25ppm(skin)	20ppm(skin)		
Sodium Nitrate	7631-99-4	N/E	N/E	N/E	
Acetic Acid	64-19-7	10ppm	10ppm	15ppm	
Succinic Acid	110-15-6	N/E	N/E	N/E	
Proprietary Antimicrobial Blend	XXXXXX	N/E	N/E	N/E	
Malic Acid	6915-15-7	N/E	N/E	N/E	

Significant potential for dermal (skin) absorption.

Exposure Controls: Avoid open electrical sources near product vapor areas.

Personal Protection Equipment:

Eyes: Chemical splash goggles recommended.

Skin and body: Impervious or chemical resistant gloves (consult safety equipment supplier).

Respiratory: Ventilation in work area should be sufficient to maintain atmosphere with vapor level below lowest listed TLV. If TLV's are exceeded, use a respirator with appropriate NIOSH approved cartridges or supplied air equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Golden Liquid

Odor: Mild ether odor.

pH: 3.80

Melting Point: N/A

Boiling Point: 212° F

Flash Point: (Tag Closed Cup Method) 158° F

Flammable Limits:

LEL: N/A

UEL: N/A

Vapor Pressure: (mmHg) < 1.0

Vapor Density: (Air = 1) N/D

Specific Gravity: (Water = 1) 1.080 @ 68° F

Solubility in water: Complete

Maximum VOC Content: 1.7 Lb/Gal (204 Gm/L)

Maximum VOC %: 19%

Odor Threshold: N/A

Evaporation Rate: N/A

Relative Density: N/A

Partition Coefficient: N-Octano/Water: N/A

Auto-ignition Temperature: N/A

Decomposition Temperature: N/A

Viscosity: N/A

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Incompatible Materials: None.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid exposure to high heat sources, electrical and welding arcs, open flame and strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION**(ATE) FOR MIXTURE:**

Specific tests have not been conducted on this product. Our evaluations based on information from the ingredients and technical literature. Data for this material has been used to estimate the symptoms and effects of exposure

Oral LD50:

LD50 Oral - $\geq 3,378$ mg/kg

Dermal LD50:

LD50 Dermal - $\geq 14,285$ mg/kg

Inhalation LC50:

LC50 Inhalation - ≥ 142 mg/l

Other information on Acute Toxicity:

No data available

Routes of exposure: Inhalation, Ingestion, Skin

Acute: Overexposure may lead to skin irritation, eye irritation, and central nervous system depression, leading to headaches, nausea and unconsciousness.

Chronic: Overexposure in high concentrations may produce central nervous system depression, dermatitis and eye irritation.

Signs and Symptoms of Exposure: Overexposure may lead to dizziness, headaches, dermatitis and eye irritation.

Medical Conditions Aggravated by Exposure: Preexisting eye, skin, liver, kidney, blood, nerve, testes, or respiratory disorders may be aggravated by exposure.

Carcinogenicity (NTP, IARC, OSHA): Components of this product have not shown any evidence of carcinogenicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in the soil: No data available

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS**Waste disposal methods:**

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

14. TRANSPORTATION INFORMATION

<u>U.S. D.O.T. DESIGNATION</u>	<u>ID NUMBER</u>	<u>HAZARD CLASS</u>	<u>PACKING GROUP</u>
Cleaning Liquid. Not Regulated.			

U.N. DESIGNATION

Same as D.O.T.

15. REGULATORY INFORMATION

Regulatory Information: This information may be useful in complying with various federal and state regulations: Components present in this product at a level which could require reporting under EPA Regulation 40CFR302 (CERCLA) Section 102 and EPA Regulation 40CFR372 (SARA) 313: This product contains approximately 6% 2-Butoxyethanol.

Product may contain components which are further regulated by state and/or local agencies - Consult Appropriate Agencies.

Notification status:

U.S.A.: Toxic Substances Control Act (TSCA)	Y
Canada: Domestic Substances List (DSL):	Y

16. OTHER INFORMATION

For More Information, Consult Tower Products, Inc.

This Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied Is Made.

Date of Preparation: April 22, 2019