



Material Safety Data Sheet

Issuing Date 18-May-2012

Revision Date

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Flush Solution for Waterborne Paint

Product Code(s) 980100

UN-Number UN1230

Product Technology S/B

Manufacturer Address

Ennis-Flint
5910 North Central Expressway
Suite 1050
Dallas TX 75206
T: 800.331.8118
800.331.8118 (For Technical Inquiries)

Chemical Emergency Phone Number Chemtrec: 1-800-424-9300 for US/ 703-527-3887 outside US

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable liquid and vapor
Harmful by inhalation, in contact with skin and if swallowed
Irritating to eyes, respiratory system and skin
May cause central nervous system depression
May adversely affect liver and kidney.

Appearance Clear

Physical State Liquid.

Odor Alcohol

Potential Health Effects

Principle Routes of Exposure Inhalation. Skin contact. Eye contact.

Acute Toxicity

Eyes

Irritating to eyes.

Skin

Harmful in contact with skin. Irritating to skin.

Inhalation

Harmful by inhalation. Irritating to respiratory system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Ingestion

Harmful if swallowed. May cause blindness if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause additional affects as listed under "Inhalation".

Chronic Effects

Inhalation, ingestion, or skin absorption of methanol can cause blindness. Long-term exposure to lower levels of methanol has been shown to cause a broad range of ocular effects, including blurring, constriction of the visible field, changes in color perception, and temporary or permanent blindness. Overexposure to methanol may result in visual disturbances, nausea, abdominal and muscle pain, dizziness, weakness and disturbances of consciousness ranging from coma to clonic seizures. May cause adverse liver and kidney effects.

Aggravated Medical Conditions	Central nervous system. Pre-existing eye disorders. Skin disorders. Respiratory disorders. Liver disorders. Kidney disorders.
Interactions with Other Chemicals	Use of alcoholic beverages may enhance toxic effects.
Environmental Hazard	See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Methyl alcohol	67-56-1	30-60

4. FIRST AID MEASURES

General Advice	Show this safety data sheet to the doctor in attendance. For further assistance, contact your local Poison Control Center
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Seek immediate medical attention/advice.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Consult a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.
Notes to Physician	Ethanol may inhibit methanol metabolism. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Highly flammable.
Flash Point	84°F / 29°C
Flashpoint Method	Closed cup
Suitable Extinguishing Media	Dry chemical, CO ₂ , water spray or alcohol-resistant foam. Use water spray or fog; do not use straight streams.
Unsuitable Extinguishing Media	CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.
Explosion Data	
Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	Yes.
Specific Hazards Arising from the Chemical	Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

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.			
NFPA	Health Hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2*	Flammability 3	Physical Hazard 0	Personal Protection X

*Indicates a chronic health hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Use personal protective equipment. Avoid contact with skin, eyes and clothing.
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment	A vapor suppressing foam may be used to reduce vapors. Dike far ahead of liquid spill for later disposal.
Methods for Cleaning Up	Dam up. Use personal protective equipment. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take precautionary measures against static discharges. Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal
Other Information	Water spray may reduce vapor; but may not prevent ignition in closed spaces.

7. HANDLING AND STORAGE

Handling	Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in an area containing flame proof equipment. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing.
Storage	Keep away from open flames, hot surfaces and sources of ignition. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol 67-56-1	STEL = 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 325 mg/m ³ STEL: 250 ppm

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures Showers. Eyewash stations. Explosion proof ventilation systems.

Personal Protective Equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and Body Protection

Impervious clothing. Chemical resistant apron. Boots. Nitrile rubber.

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.

Hygiene Measures When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear.	Odor	Alcohol.
Odor Threshold	Not applicable	Physical State	Liquid
pH	8		
Flash Point	84°F / 29°C	Flashpoint Method	Closed cup
Autoignition Temperature	Not applicable	Decomposition Temperature	Not applicable
Boiling Point/Boiling Range	Not applicable	Melting Point/Range	Not applicable
Flammability Limits in Air	(For Methanol)		
Upper	36%		
Lower	6%		
Specific Gravity	0.90644	Solubility	Soluble
Evaporation Rate	Not applicable	Vapor Pressure	Not applicable
Vapor Density	Not applicable	VOC (g/l)	800

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Products Strong oxidizing agents. Aluminum.

Conditions to Avoid Heat, flames and sparks.

Hazardous Decomposition Products Carbon oxides. Formaldehyde.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	83.2 mg/L (Rat) 4 h 64000 ppm (Rat) 4 h

Chronic Toxicity

Chronic Toxicity

Inhalation, ingestion, or skin absorption of methanol can cause blindness. Long-term exposure to lower levels of methanol has been shown to cause a broad range of ocular effects, including blurring, constriction of the visible field, changes in color perception, and temporary or permanent blindness. Overexposure to methanol may result in visual disturbances, nausea, abdominal and muscle pain, dizziness, weakness and disturbances of consciousness ranging from coma to clonic seizures. May cause adverse liver and kidney effects.

Carcinogenicity

Contains no ingredient listed as a carcinogen.

Target Organ Effects

Central nervous system (CNS). Respiratory system. Liver. Kidney.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyl alcohol	-	LC50 96 h: 13500 - 17600 mg/L flow-through (Lepomis macrochirus) LC50 96 h: 18 - 20 mL/L static (Oncorhynchus mykiss) LC50 96 h: 19500 - 20700 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 28200 mg/L flow-through (Pimephales promelas) LC50 96 h: > 100 mg/L static (Pimephales promelas)	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	-

Chemical Name	Log Pow
Methyl alcohol	-0.77

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Do not re-use empty containers.

US EPA Waste Number D001
U154

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl alcohol - 67-56-1		Included in waste stream: F039		U154

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Methyl alcohol	Toxic Ignitable

14. TRANSPORT INFORMATION**DOT**

UN-Number	UN1230
Proper shipping name	Methanol
Hazard Class	3
Subsidiary Class	
Packing Group	II
Special Provisions	This shipment under Class 3 only is only allowed for domestic shipments.
Description	UN1230, Methanol, 3, , II
Emergency Response Guide Number	131

TDG

UN-Number	UN1230
Proper Shipping Name	Methanol
Hazard Class	3
Subsidiary Class	(6.1)
Packing Group	II
Description	UN1230, METHANOL, 3(6.1), II

MEX

UN-Number	UN1230
Proper Shipping Name	Methanol
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
Description	UN1230 Methanol, 3(6.1), II

ICAO

UN-Number	UN1230
Proper shipping name	Methanol
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
Description	UN1230, Methanol, 3(6.1), II

IATA

UN-Number	UN1230
Proper Shipping Name	Methanol
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
ERG Code	3L
Description	UN1230, Methanol, 3(6.1), II

IMDG/IMO

UN-Number	UN1230
Proper Shipping Name	Methanol
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
EmS No.	F-E, S-D
Description	UN1230, Methanol, 3(6.1), II, FP 29C

RID

UN-Number	UN1230
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Proper Shipping Name	Methanol
Hazard Class	3
Packing Group	II
Classification Code	FT1
Description	UN1230 Methanol, 3(6.1), II
ADR/RID-Labels	6.1

ADR

UN-Number	UN1230
Proper Shipping Name	Methanol
Hazard Class	3
Packing Group	II
Classification Code	FT1
Description	UN1230 Methanol, 3(6.1), II
ADR/RID-Labels	6.1

ADN

UN-No	UN1230
Proper Shipping Name	Methanol
Hazard Class	3
Packing Group	II
Classification Code	FT1
Special Provisions	279, 802
Description	UN1230 Methanol, 3(6.1), II
Hazard Labels	3 + 6.1
Limited Quantity	LQ0
Ventilation	VE01, VE02

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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	CAS-No	Weight %	SARA 313 - Threshold Values %
Methyl alcohol	67-56-1	38	1.0

SARA 311/312 Hazard Categories

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

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
Ammonium hydroxide	1000 lb			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	Extremely Hazardous Substances RQs	RQ
Methyl alcohol	5000 lb		RQ= 2270 kg final RQ RQ= 5000 lb final RQ
Ammonium hydroxide	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Methyl alcohol	X	X	X	X	X

International Regulations**Mexico - Grade**

Serious risk, Grade 3

Chemical Name	Carcinogen Status	Exposure Limits
Methyl alcohol		Mexico: TWA= 200 ppm Mexico: TWA= 260 mg/m ³ Mexico: STEL= 250 ppm Mexico: STEL= 310 mg/m ³

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B2 Flammable liquid
D1B Toxic materials
D2A Very toxic materials
D2B Toxic materials

**Canadian National Pollutant Release Inventory (NPRI)**

Chemical Name	NPRI
Methyl alcohol	X

Legend

X - Listed

16. OTHER INFORMATION

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date 18-May-2012

Revision Date

Revision Note Initial Release.

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. The information given is designed only as a guide 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 material or in any process, unless specified in the text. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.

End of Safety Data Sheet