

Material Safety Data Sheet

JETRION SV DOD 2100 FLUSH/CLEANER

Flush S6

1260 James L Hart Parkway
 Ypsilanti, MI 48197
 For Product Questions call: (734) 641-3062
 For Health and Safety Questions call:
 (734) 641-3062
 24 Hour Emergency Spill Contact call:
 (800) 424-9300 Chemtrec (US/Canada)

Graph-Tech AG
 Aeschwahrstr. 15
 4665 Oftringen
 Switzerland

 T +41 (0)62 746 0650
 F +41 (0)62 746 0655
 info@graph-tech.ch

I. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	JETRION SV DOD 2100 FLUSH/CLEANER	Flush S6
Product Code:	WFW2100	20011
MSDS Code:	MSD-00342668	
Revision Number:	1.0	
Revision Date:	2006-06-15	2007-12-11

II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%
Propylene Glycol	30 - 60

Please see Section VIII for product and component exposure guidelines. Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

III. HAZARDS IDENTIFICATION

HMIS Rating **Health: 1** **Flammability: 2** **Reactivity: 0**

This product falls under the following WHMIS class:
 B3

Routes of Entry: Inhalation, Ingestion, Skin contact, Eye contact
Medical Conditions No medical conditions affected by exposure.
Aggravated:

Immediate (Acute) Health Effects by Route of Exposure

Inhalation: Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. No hazard in normal industrial use.
 Moderately irritating to respiratory tract.

Skin Contact: Can cause minor skin irritation, defatting, and dermatitis.

Eye Contact: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Ingestion: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Harmful if swallowed.

JETRION SV DOD 2100 FLUSH/CLEANER

Page 1 of 5

Long-Term (Chronic) Health Effects

Reproductive and Developmental: No data available to indicate product or any components present at greater than 0.1% may cause birth defects. No information available.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Inhalation: Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Ingredients of this product appear on the following OSHA identified carcinogen lists at >= 0.1% by weight (yes/no):

OSHA	No	NTP	No	IARC 1 & 2A	No	NIOSH	No
				IARC 2B	No		

IV. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

Eyes: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.

V. FIRE FIGHTING MEASURES

Flammability Summary: Combustible NFPA IIIA (NFPA description only; not to be used for shipping purposes)

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.

Fire and/or Explosion Hazards: Material may be ignited if preheated to temperatures above the flash point in the presence of a source of ignition. Combustible Liquid. Can form explosive mixtures at temperatures at or above the flash point. Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death. During a fire irritating or toxic gases may be generated by thermal decomposition or combustion.

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Flash Point:	61 C (142 F) - < 93 C (200 F)
Firepoint:	Firepoint not determined.
Autoignition Temperature:	215 deg. C 419 deg F
Upper Flammable/Explosive Limit, % in air:	12.6
Lower Flammable/Explosive Limit, % in air:	1.4

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section VIII of this MSDS.
--	--

VII. HANDLING AND STORAGE

Handling Precautions:	Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Use with adequate ventilation "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous.
Storage Conditions:	Store in a cool dry place. Isolate from incompatible materials. Store in a cool dry place. Keep away from heat, sparks, and flame. Do not store near combustible materials. Store in a tightly closed container.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.			
Respiratory Protection:	Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator. Respiratory protection may be required in addition to ventilation depending upon conditions of use.			
Eye Protection:	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.			
Skin Protection:	Where splashing is possible, full chemically resistant protective clothing including boots are recommended. Where use can result in skin contact, practice good personal hygiene.			
Gloves:	Wear impervious material no specific details available.			
Exposure Guidelines:				
Chemical Name	OSHA Exposure Limits	ACGIH TLV - TWA	ACGIH STEL	IDLH
Propylene Glycol		No TLV	No STEL	Not on list

If this product is provided in a dry powder state it should be considered a nuisance dust (PEL 10 mg/m³).

If the processing of this product produces a mist it should be considered to be an oil mist with a PEL of 5 mg/m³.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid, semi-solid, or solid
Solubility in Water:	Complete; 100%
Vapor Pressure (mmHg):	
Vapor Density (Air = 1):	
Volatiles, % by wt:	100.00
Volatiles, % by vol:	100.00
Volatile Organic Chemicals % by wt:	100.00
Volatile Organic Chemicals % by vol:	100.00
VOC lb/gal	8.66
VOC lb/gal (less water):	8.66
Solids % by weight:	0.00
Solids % by volume	0.00
Boiling Point:	188 deg. C 370 deg. F
Specific Gravity:	1.04
Bulk Density (Lb/Gal):	8.66

X. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Temperatures above flash point in combination with sparks, open flames, or other sources of ignition.
Materials to Avoid/Chemical Incompatibility:	Strong oxidizing agents. Acids Strong reducing agents
Hazardous Decomposition Products:	Carbon dioxide Carbon monoxide

XI. TOXICOLOGICAL INFORMATION**Component Toxicology Data (NIOSH):**

Chemical Name
Propylene Glycol

LD50/LC50

ORAL, RAT: LD50 = 20 GM/KG; ORAL,
MOUSE: LD50 = 22 GM/KG; SKIN, RABBIT:
LD50 = 20800 MG/KG

XII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product:	Spent or discarded material is not expected to be a hazardous waste.
Disposal Methods:	Dispose in accordance with Federal, State, Provincial and Local regulations. Material may be compatible with industrial waste incineration or inclusion in a fuel blending program. This characterization is subject to approval by your waste management contractor. This material should be recycled if possible.

XIII. REGULATORY INFORMATION

TSCA Status	All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
--------------------	---

Chemical Name

Not on list
 Glycol Ethers
 Not on list
 Not on list
 Glycol Ethers (N230)
 Not on list

Regulation

CERCLA
 HAP
 NPRI (CAN)
 PROP 65
 SARA 313
 SARA EHS

The following items require export notification for TSCA**Chemical Name**

Not on list

TSCA 12b list section

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

The following chemicals are disclosed to satisfy New Jersey and Pennsylvania Right to Know

Laws: Diethylene Glycol Monomethyl Ether
 Propylene Glycol

XIV. ADDITIONAL INFORMATION**References:**

Disclaimer: EFI-Jetrion has prepared this Material Safety Data Sheet ("MSDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this MSDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this MSDS shall not constitute a warranty with respect thereto.