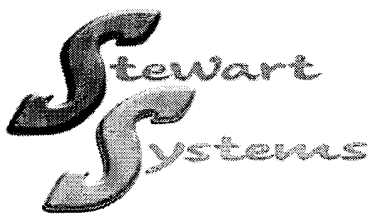





09-03089
09-03090

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION			
PRODUCT NAME: EkoClean		PART NUMBER: E670	
TRADE NAME: EkoClean			
GENERAL USE: Cleaner			
CHEMICAL FAMILY: Inorganic Alkaline Liquid.			
PRODUCT DESCRIPTION: Red liquid with a mild citrus odor.			
MANUFACTURER: Stewart Systems			
TELEPHONE NUMBER (General Inquiries): 888-356-7659		EFFECTIVE DATE: October 7, 2010	
ADDRESS (NUMBER, STREET, P.O. BOX): 5500 Sullivan Street		DATE OF EXPIRATION: October 6, 2013	
(CITY, STATE AND ZIP CODE): Cashmere, WA 98815		SUPERSEDES DATE: 6/16/2010 and 9/1/2006	
COUNTRY: USA		CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS	
			1-800-255-3924 North America (Toll Free)
			813-248-0585 International and Local Calls
SECTION 2: HAZARD IDENTIFICATION			
EMERGENCY OVERVIEW			
Caution! May cause eye, skin, and respiratory tract irritation . Corrosive to metals. Product is non-combustible.			
USA (DOT)	CANADA (WHMIS)	EUROPEAN	(GHS) HAZARD SYMBOLS
None	None	None	None
HMIS HAZARD RATINGS			
0 = INSIGNIFICANT, 1 = SLIGHT, 2 = MODERATE 3 = HIGH, 4 = EXTREME * - CHRONIC HEALTH HAZARD		HEALTH:	1
		FLAMMABILITY:	0
		PHYSICAL HAZARD:	0
REQUIRED PERSONAL PROTECTIVE EQUIPMENT:			
HMIS PERSONAL PROTECTIVE EQUIPMENT LETTER: B		 	Wear safety glasses, and gloves .
RISK PHRASES			
None			
SAFETY PHRASES			
S2: Keep out of the reach of children.			
S13: Keep away from food, drink and animal feedstuffs.			
S24/25: Avoid contact with skin and eyes.			
POTENTIAL HEALTH EFFECTS			
ACUTE EXPOSURE EFFECTS			
INHALATION:			
May cause irritation of respiratory tract. May be harmful if inhaled.			
SKIN:			
May cause irritation. May be harmful in contact with skin.			
EYES:			
May cause eye injury. Contact with liquid is irritating to the eyes and capable of causing burns.			
INGESTION:			
May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.			

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: EkoClean					
PART NUMBER: E670					
SECTION 2: HAZARDS IDENTIFICATION (Continued)					
CHRONIC EXPOSURE EFFECTS					
None likely at the concentration present.					
CARCINOGENICITY:					
NTP? NO	IARC MONOGRAPHS? NO				
CALIFORNIA, Prop.65? NO	OSHA REGULATED? NO				
	ESIS NOTATION? NO				
SECTION 3: HAZARDOUS INGREDIENTS					
Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Sodium Metasilicate	<10	6834-92-0	229-912-9	C	R34, R37
SECTION 4: FIRST AID MEASURES					
INHALATION:					
Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.					
EYES:					
Remove contact lenses if present. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.					
SKIN:					
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical aid if irritation persists.					
INGESTION:					
Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 1-2 cupfuls of water. Get medical aid immediately. Never give anything by mouth to an unconscious person.					
SECTION 5: FIRE FIGHTING MEASURES					
DATA RELATED TO FIRE:					
FLASH POINT: None		AUTO-IGNITION TEMPERATURE: NR			
FLAMMABLE/EXPLOSIVE LIMITS: NR		LOWER: NR		UPPER: NR	
Sensitivity to Mechanical Impact/ STATIC DISCHARGE: None.					
GENERAL HAZARDS:					
Not flammable or combustible.					
SUITABLE EXTINGUISHING MEDIA:					
Any media may be used.					
UNSUITABLE EXTINGUISHING MEDIA:					
None.					
FIRE FIGHTING PROCEDURES:					
Procedures should be selected to suit total fire. Wear proper chemical gear.					
UNUSUAL FIRE AND EXPLOSION HAZARDS:					
Material released during fire may be slippery. Use due care to avoid falls.					
HAZARDOUS COMBUSTION PRODUCTS:					
Carbon dioxide, Carbon monoxide, Silicon oxides, Sodium Oxides.					
SECTION 6: ACCIDENTAL RELEASE MEASURES					
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:					
Use proper personal protective equipment as indicated in Section 2. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section).					
SECTION 7: HANDLING AND STORAGE					
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:					
Wash thoroughly after handling. Avoid prolonged contact with skin; avoid all contact with eyes. Keep container tightly closed. Avoid ingestion. Use with adequate ventilation. Wash clothing before reuse. Storage: Store in a cool, dry place. Store in a tightly closed container.					

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: EkoClean			
PART NUMBER: E670			
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
Component	CAS #	ACGIH Exposure Limits (mg/m3 unless otherwise noted)	OSHA Exposure Limits (mg/m3 unless otherwise noted)
Sodium Silicate	6834-92-0	NE	NE
PERSONAL PROTECTION			
RESPIRATORY PROTECTION: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.			
PROTECTIVE GLOVES: Wear protective gloves to prevent prolonged skin exposure; neoprene is a good choice for mechanical and chemical resistance.			
EYE PROTECTION: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.			
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.			
ENGINEERING CONTROLS: Ensure that eyewash stations and safety showers are close to the workstation location.			
WORK / HYGIENIC PRACTICES: Wash off with plenty of soap and water after handling the product and prior to eating, smoking or drinking.			
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
APPEARANCE AND ODOR Red liquid with a mild citrus odor.		VAPOR PRESSURE <air	
ODOR THRESHOLD NR		SPECIFIC GRAVITY (WATER = 1) 1.03	
FREEZING / MELTING POINT <0°C / 32°F		BOILING POINT >100°C / 212°F	
SOLUBILITY IN WATER Complete		COEFFICIENT OF WATER / OIL DISTRIBUTION Favors Water.	
pH <10		SOLUBILITY IN ORGANIC SOLVENTS NR	
FLASH POINT None.		VISCOSITY NR	
FLAMMABLE LIMITS LEL: None UEL: None		VAPOR DENSITY (AIR = 1) Not determined.	
AUTOIGNITION TEMPERATURE None.		EVAPORATION RATE (WATER = 1) NR	
VOLATILE ORGANIC COMPOUND (VOC) INFORMATION NA			
SECTION 10: STABILITY AND REACTIVITY			
STABILITY Stable under normal conditions of use.		CONDITIONS TO AVOID: Excessive heat, incompatible reactive materials, avoid freezing.	
INCOMPATIBILITY (MATERIALS TO AVOID): Strong Acids, Metals.			
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon dioxide, Carbon monoxide, Silicon Oxides, Sodium Oxides.			
HAZARDOUS POLYMERIZATION: Will not occur.		CONDITIONS TO AVOID: Excessive heating, oxidizers.	

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: EkoClean
PART NUMBER: E670

SECTION 11 - TOXICOLOGICAL INFORMATION

Complete Product

Oral LD₅₀	Product is a gastro-intestinal irritant.
Dermal LD₅₀	Product produces skin irritation and possible burns depending on duration of contact.
Inhalation LC₅₀	Not known - product is an irritant to the respiratory tract.
Irritation / Sensitization	Chemical irritant to eyes; possible irritant to skin and respiratory tract.
Carcinogenicity	Not Known
Mutagenicity	Not Known
Reproductive Toxicity	Experiments have shown reproductive toxicity effects on laboratory animals.
Teratogenicity	Not Known

Product Components

Component	CAS #	LD50 of Ingredient (Oral, Rat - unless otherwise specified)	LC50 of Ingredient (Inhalation, Rat - unless otherwise specified)
Sodium Silicate	6834-92-0	600 mg/kg	NE

SECTION 12 - ENVIRONMENTAL INFORMATION

No data for total product. For Sodium metasilicate: Water Flea EC50 96 h 216 mg/L

SECTION 13 - DISPOSAL INFORMATION

WASTE DISPOSAL METHOD:

Small amounts of product may be washed into sewage systems without harm; take precautions to avoid discharging large quantities of product into bodies of water. Waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not regulated for transport

DOT HAZARD CLASS / Pack Group: NA	IATA HAZARD CLASS / Pack Group: NA
REFERENCE: 49CFR	IMDG HAZARD CLASS: NA
UN / NA IDENTIFICATION NUMBER: None	RID/ADR Dangerous Goods Code: NA
LABEL: None	TDG Class / Pack Group: NA
HAZARD SYMBOLS: None	Hazard Identification Number (HIN): NA

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): **Components are listed.**

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):

Acute Health:	NO	Chronic Health:	NO
Fire:	NO	Sudden Release of Pressure:	NO
Reactive:	NO		

SARA 313 REPORTABLE INGREDIENTS: **None reportable.**

CERCLA (USA - Comprehensive Response Compensation and Liability Act):

No RQ's are listed.

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

No components reportable.

CPR (Canadian Controlled Products Regulations): **This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. WHMIS Classifications: None applicable.**

IDL (Canadian Ingredient Disclosure List): **CAS# 7664-38-2 is listed on Canada's Ingredient Disclosure List.**

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List):

Listed in DSL

EINECS (European Inventory of Existing Commercial Chemical Substances):

Referenced.

WGK Water Quality Index: **1**

MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: EkoClean
PART NUMBER: E670

SECTION 10 OTHER INFORMATION

Legend:

ACGIH American Congress of Government Industrial Hygienists
CAS Chemical Abstracts Service
EINECS European Inventory of Existing Commercial Chemical Substances
HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer
NA Not Available ND Not Determined
NE Not Established NR Not Reported
NIOSH National Institute for Occupational Safety and Health
NTP National Toxicology Program
OSHA Occupational Safety and Health Administration

REVISION SUMMARY:

Revised issue to ANSI/WHMIS/EU/GHS standards 10/07/2010. Supersedes 9/1/2006 and 6/16/2010 issues. --JTV--.

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