# Formula 710 Multi-Surface Acid Cleaner

#### MATERIAL SAFETY DATA SHEET

Tennant 701 North lilac Drive P.O. Box 1452 Minneapolis, MN 55440-1452

This Material Safety Data Sheet (MSDS) has been prepaired in compliance with Federal OSHA Hazard Communication Standard 29 CFR 1910, 1200. The information and recommendations contained herin are based upon data beleived to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contailed herin.

## **Emergency Phone Numbers:**

CHEMTREC (800) 424-930 (24 Hrs) District of Columbia (202) 483-7616 (24 hrs)

Canada CANUTEC (613) 996-6666 (24hrs) MSDS Requests: (800) 553-8033

Preparation Info: By:Judy Wagner

(763) 540-1556 (days) (763) 767-8875 (nights)

Issue Date: 8/10/00	Supercedes: 3/	Supercedes: 3/23/00		
HAZARD RATING		<b>NFPA</b>	<b>HMIS</b>	
Health		3	2	
Fire		1	1	
Reactivity		0	0	
Special		COR	X	
4 = Extreme	3 = High		2 = Moderate	
1 = Slight	0 = Insignificant		COR = Corrosive	
· ·	X = Ask supervisor for	or guidance		

## \*\*\*\* I. IDENTIFICATION \*\*\*\*

Product Name: US Dept of Transporation(Ground):

Formula 710 Multi-Surface Acid Cleaner UN#: UN1760 Packing Group: II

Part Number: 609801, 609803 Hazard Classification: Corrosive

Chemical Family:Acid CleanerShipping Name:Corrosive Liquid, N.O.S.Material Use:Restroom Cleaner(contains Phosphoric and Sulfmic Acid)

#### \*\*\*\* II. PHYSICAL DATA \*\*\*\*

Boiling Point:  $212^{\circ}\text{F} / 100^{\circ}\text{C}$  Freeze Point:  $0^{\circ}\text{F} / -18^{\circ}\text{C}$  Density: 1.1kg/L % Volatile: 73.5 by wt.

Solubility in Water: Complete Vapor Pressure: N.Av. mm Hg at 20° C.

Odor Threshold: N.AV. pH: 1.7 @ 10%
Physical Form: Liquid Vapor Density: N.Av. than Air

Appearance and Odor Pink/Wintergreen Coefficient Water/Oil Distribution: N.Av. Evaporation Rate: Slower VOC g/L (lb/gal): 402 (3.35) Mechanical Impact: N.Av. Static Discharge: N.Av.

## \*\*\*\* III. INGREDIENTS \*\*\*\*

CHEMICAL	<u>CAS #:</u> %W	OSHA PEL ppm	ACGHI TVL TWA ppm	ACGIH TVL STEL ppr	LD50 <u>n</u>	<u>LC50</u> NHALATION
Citric Acid	77-92-9 10- 20	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
Dipropylene Glycol Monomethyl Ether (HDZ)	34590-94- 10- 8 20	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
Phosphoric Acid (HZD) Sulfamic Acid (HDZ)	7664-38-2 5.3 5329-14-6 5-10	N.Av. N.Av.	0.25 N.Av.	0.75 N.Av.	N.Av. N.Av.	N.Av. N.Av.
Surfactant	* 5-10	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.

## SARA Title III Section 313 Information:

Components presented in this product at a level which could require reporting under this statute

Phosphoric Acid: CAS#:7664-38-2 5.3%by wt.

## California Proposition 65 Information:

This product contains the following chemicals that have been designated as cancer and/or reporductive

hazard under California Proposition 65.

Trace amounts of Ethylene Oxide - CAS #75-21-8

Propylene Oxide - CAS #75-56-9 and

1, 4 Diozane CAS #123-91-1

## \*\*\*\* IV. FIRE AND EXPLOSIVE HAZARD DATA \*\*\*\*

FLAMMABLE: **FLASH POINT:** 170°F / 76°C No

FLAMMABLE LIMITS %LEL: N.Av. % ULE: N.Av.

**AUTOIGNITION** 

**TEMPERATURE** 

N.Av.

use National Fire Protection Association (N.F.P.A.) Class B **EXTINGUISHING MEDIA:** 

extinguishers (carbon dioxide, dry chemical, foam)

SPECIAL FIRE FIGHTING Water may be ineffective, but may be used to cool

closed PROCEDURES:

> containers to prevent pressure buildup possible auto ignition when exposed to extreme heat (fod nozzles prefered). Wear self-contained breathing aparatus.

Keep containers tightly closed from heat, electrical

UNUSUAL FIRE EXPLOSION HAZARD: equipment, sparks and open flame. Closed containers

explode when exposed to extreme heat. Do not apply

hot surfaces.

# \*\*\*\* V. REACTIVITY DATA \*\*\*\*

**HAZARDOUS** Will Not Occur STABILITY: Stable **POLYMERIZATION:** 

CONDITIONS TO AVOID: N.Av.

**INCOMPATIBILITY** (materials to avoid): Strong Alkali.

HAZARDOUS DECOMPOSITION Carbon dioxide, carbon monoxide, and oxides

PRODUCTS: phosphorus, nitrogen, sulfer, ammonia, or amines.

#### \*\*\*\* VI. HEALTH HAZARD DATA \*\*\*\*

EFFECTS OF THRESHOLD LIMIT VALUE - See Section III for individual

**OVEREXPOSURE:** ingredients

PRIMARY ROUTES OF ENTRY: Inhalation, Skin Contact

Skin contact may cause severe irritation. Prolonged or

SKIN CONTACT/ABSORPTION: repeated skin

contact may cause burns.

**EYE CONTACT:** Extremely irritating with possible permanent eye injury.

Contains materials which will cfause a burning sensation.

gastric

INGESTION (swallowing): upset, diarrhea and severe inflamation to the mucous

membranes.

**INHALATION (breathing):** Slight headache. May burn nasal passages.

SUPPLEMENTAL HEALTH INFORMATION:

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and

nervous system damage. Intentinal misuse by deliberately concentrating this product may be harmful or fatal.

#### \*\*\*\* VII. EMERGENCY AND FIRST AID PROCEDURES \*\*\*\*

SKIN CONTACT: Wash immediately with mild soap and water.

Rinse thoroughly with cool water.

Flush immediately with water for 15 minutes: CALL A PHYSICIAN.

CALL A PHYSICIAN OR POISION CONTOL CENTER IMMEDIATELY.

(swallowing):

DO NOT attempt to induce vomiting. give two glasses of water and

have

this document available.

INHALATION

(breathing): Remove to fresh air.

## \*\*\*\* VIII. PREVENTATIVE MEASURES \*\*\*\*

#### **SPILL OR LEAK PROCEDURE:**

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Absorb with inert material (sand, vermiculite, etc.). Sweep or scoop ua and dispose container. Flush

area with water; prevent washings from entering waterways.

### **WASTE DISPOSAL METHOD**

Dispose of in accordance with federal, state and local regualtions.

**SPECIAL PROTECTION INFORMATION:** RESPIRATORY PROTECTION (specify type) and VENTILATION (local exhaust):

Unless air monitoring demonstrates vapor/mist levels above applicable limits, no respiratory is required.

If respirator is required, the appropriate, properly fitted respirator (NIOSH/MSHA approved) should be

worn during application. Follow respirator manufacturors directions for respirator use.

PROTECTIVE GLOVES (specify type): Impervious gloves; i.e., rubber, nitrile

EYE PROTECTION (specify type): Chemical splash goggles

## **SPECIAL PERCAUTIONS:**

#### PERCAUTIONS TO BE TAKEN IN HANDELING AND STORAGE:

Store in a cool (below 100°F, 37.5°C), dry place.

# **OTHER PERCATUIONS:**

Do not take internally. Avoid prolonged contact with skin; contaminated clothing should be removed

immediately. Avoid free fall of liquid in excess of a few inches.