

# MATERIAL SAFETY DATA SHEET

## **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

MANUFACTURER: TRANSENE COMPANY, INC.  
ADDRESS: DANVERS INDUSTRIAL PARK  
10 ELECTRONICS AVENUE DANVERS, MA 01923  
TEL: (978) 777-7860 FAX: (978)-739-5640  
WWW.TRANSENE.COM  
EMERGENCY NO. 1-800-424-9300 CHEMTREC

MATERIAL NAME: **WRIGHT ETCHANT**

REVISED: April 2009

CHEMICAL FAMILY: Inorganic Acid Mixture

## **SECTION 2. HEALTH HAZARD INFORMATION**

### **GHS Classifications**

Oxidizing liquids : Category 3  
Corrosive to metals: Category 1  
Acute toxicity oral : Category 1  
Acute toxicity inhalation : Category 2  
Skin corrosion / skin irritation : Category 1A  
Serious eye damage / Eye irritation : Category 1  
Respiratory or skin sensitization : Not classified  
Special target organ systemic toxicity single exposure: Category 2  
Special target organ systemic toxicity repeated exposure : Category 2  
Acute aquatic environmental hazards : Category 2  
Chronic aquatic environmental hazards: Category 4

### **Pictograms or Hazard symbols**



Warning: May intensify fire; oxidizer.



Warning: May be corrosive to metals



Danger: Fatal if swallowed. Toxic if inhaled.



Danger: Causes severe skin burns and eye damage. Causes serious eye damage.



May cause damage to bones, lungs, eyes, and mucous membranes.

Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

### **Precautionary Statement Prevention**

Use only in a well-ventilated area. Do not eat, drink or smoke when using this product. Do not breathe fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing /eye protection/face protection.

Wash hands thoroughly after handling.

Avoid release to the environment

## **SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS**

Material		Wt %	
Hydrofluoric Acid	CAS# 7664-39-3	10-15	3 ppm ACGIH TLV
Nitric Acid	CAS# 7697-37-2	10-15	2 ppm
Acetic Acid	CAS# 64-19-7	20-25	10 ppm
Chromic Acid	CAS# 1333-82-0	5-7	0.5 mg/m <sup>3</sup>
Cupric Nitrate	CAS# 3251-23-8	< 4	1 mg/m <sup>3</sup>
Water	CAS# 7732-18-5	34-51	
Total		100	

## **SECTION 4. FIRST AID MEASURES**

### **EFFECTS OF OVEREXPOSURE**

#### **FIRST AID:**

**Eye Contact:** Both liquid and vapor are corrosive to naked eye; in case of contact flush eyes well for 15 minutes, lifting the lower and upper eyelids occasionally. May cause permanent eye damage or blindness. Seek medical attention.

**Skin Contact:** Obtain medical attention: Both liquid and vapor are corrosive to exposed skin. Flush skin well with water for 15 minutes, wash with soap and water. Remove affected clothing, get medical attention. May cause deep, penetrating burns. May cause hypocalcemia which in rare cases is fatal. Special medical treatment is required.

**Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration. Seek medical attention. Inhalation of vapors may cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract. In severe cases, may pulmonary edema, circulatory failure, and death. Depletes calcium levels in the body if not promptly treated, resulting in death.

**Ingestion:** Will cause severe burns to the mouth and severe and permanent damage to the digestive tract. Causes gastrointestinal burns and perforation of the digestive tract. Get Medical Attention immediately. Do not induce vomiting; give large quantities of water. Can affect kidney function and be fatal if swallowed. Severe and possibly fatal hypocalcemia is likely to occur unless medical treatment is promptly initiated.

## SECTION 5. FIRE FIGHTING MEASURES

Flash Point and Method non-flammable	Autoignition Temp. NA	Flammability Limits In Air	<u>LOWER</u> NA	<u>UPPER</u> NA
---	--------------------------	----------------------------	--------------------	--------------------

**Extinguishing media:** Use water spray or suitable agent for surrounding fire. Do not use solid water streams. Acid reacts violently with water and can splatter acid onto personnel.

**Special fire fighting procedures:** Wear chemically retardant gear and NIOSH approved self-contained breathing apparatus. Thermal decomposition produces irritating and toxic fumes. Extreme heat or contact with metals can release flammable hydrogen gas, ammonia.

Toxic gases released: Hydrogen fluoride, hydrogen gas, nitrogen oxides, carbon dioxide, carbon monoxide.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**SPILLS, LEAKS:** Ventilate area of leak or spill. Stop leak if possible to do so without risk. Clean-up personnel must wear protective clothing and NIOSH approved respirator. Dike and cover the contaminated areas with absorbent, non-combustible material such as earth, sand, or vermiculite. Neutralize with alkaline material such as soda ash or lime. Do not use combustibles. Do not flush to sewer.

## SECTION 7. HANDLING AND STORAGE

Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Do not breathe mist or vapor. Do not expose eyes, skin, or clothing. Keep container closed tightly. Avoid contact with combustibles. Do not use with metal tools or items. Use with adequate ventilation or respiratory protection. Do not store near combustibles or in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances. Separate from metals, alkali, and organics. Residue in empty containers may still be hazardous.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory protection:** Wear NIOSH/MESA approved full or half face piece (with goggles) respiratory protective equipment to avoid exposure to iodine vapors above 0.1ppm. A respiratory protection program complying with requirements of 29CFR 1910.134 is recommended.

**Ventilation:** Where adequate ventilation is not available, use NIOSH approved vapor respirator with dust, fume and mist filters. Local ventilation through fume hoods or laminar flow stations is also preferred. Keep fumes away from strong bases.

**Protective gloves:** Skin contact should be minimized through use of acid resistant gloves.

Other protective equipment: Steel tipped shoes/eye wash station/chemical safety chemical retardant clothing.

Eye protection: Safety goggles / face shield. Do not wear contact lenses.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form :</b>	Liquid
<b>Appearance :</b>	Dark amber-brown
<b>Odor :</b>	Acrid, pungent, vinegar
<b>pH :</b>	< 1
<b>Melting point:</b>	-42 °C
<b>Boiling point/Boiling range :</b>	118-120 °C
<b>Flash point :</b>	Non-flammable.
<b>Ignition point :</b>	Will not ignite.
<b>Danger of explosion:</b>	Product is not explosive



## **SECTION 14. TRANSPORTATION INFORMATION**

Class 8, 6.1

PG II

UN2922

Shipping Name: Corrosive Liquids, Toxic, N.O.S. (Hydrofluoric Acid and Acetic Acid Solution)

## **SECTION 15. REGULATORY**

Symbol: C, Corrosive T, Toxic

R-Phrase: 35, causes severe burns

S-Phrases: 23-36/37/39-45 Do not breathe vapor. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## **SECTION 16. OTHER INFORMATION**

NFPA Codes:

Health: 3

Flammability: 0

Reactivity: 1

WHMIS Codes:

Health: 4

Flammability: 0

Reactivity: 0

R35: Causes severe burns.

Ingredients are TSCA listed.