

**MATERIAL SAFETY DATA SHEET**

**PRODUCT NAME: EFFLORESCENCE & SCALE REMOVER**  
**PRODUCT CODE: 143ES-4G**

**HMIS CODES: H F R P**  
**2 0 1 C**

===== **SECTION I - MANUFACTURER IDENTIFICATION** =====

**MANUFACTURER'S NAME:** ENVYSS, LLC  
**ADDRESS:** Monroe, GA 30655  
**EMERGENCY PHONE:** 800-535-5053  
**INFORMATION PHONE:** 770-934-4242

**NAME OF PREPARER :** Alan Sumner  
**DATE OF PREPARATION :** 6/16/1998

===== **SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION** =====

<b>REPORTABLE COMPONENTS</b>	<b>CAS NUMBER</b>	<b>VAPOR PRESSURE MM HG @ TEMP</b>	<b>WEIGHT PERCENT</b>
* HYDROGEN CHLORIDE 5 PPM TLV/PEL CEILING	7647-01-0	55MM 20°C	52

\* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

===== **SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS** =====

**BOILING POINT:** 215 F **SPECIFIC GRAVITY (H2O=1):** 1.07  
**VAPOR DENSITY:** Unknown **EVAPORATION RATE:** Near that of water  
**MATERIAL V.O.C.:** 0.005 lb/gl  
**SOLUBILITY IN WATER:** Soluble  
**APPEARANCE AND ODOR:** Clear liquid. Yellow color.

===== **SECTION IV - FIRE AND EXPLOSION HAZARD DATA** =====

**FLASH POINT:** None to boiling  
**METHOD USED:** N/A  
**FLAMMABLE LIMITS IN AIR BY VOLUME-** LOWER: N/A UPPER: N/A  
**FLAME EXTENSION:** NOT APPLICABLE  
**EXTINGUISHING MEDIA:** NOT APPLICABLE  
**SPECIAL FIREFIGHTING PROCEDURES:** Wear NIOSH approved self-contained breathing apparatus with full facepiece and protective clothing to prevent contact with skin and eyes. Use water spray to cool fire exposed containers.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Hydrogen chloride gas can be liberated in a fire. Contact with soft metals can liberate flammable hydrogen gas.

===== **SECTION V - REACTIVITY DATA** =====

**STABILITY:** Stable under normal conditions.  
**CONDITIONS TO AVOID:** Poor ventilation.  
**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong oxidizing agents such as chlorine bleach.  
**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** Hydrogen chloride gas.  
**HAZARDOUS POLYMERIZATION:** Will not occur.

**===== SECTION VI - HEALTH HAZARD DATA =====**

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** INHALATION: May cause severe irritation of the respiratory tract. High concentrations may cause burns of the respiratory tract and may be harmful.

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** EYE CONTACT: Contact can cause irreversible eye damage. Symptoms may include stinging, tearing, redness, swelling and corneal damage and blindness. SKIN CONTACT: Exposure may cause severe skin irritation. Prolonged or repeated exposure may cause severe skin damage.

**SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** NOT APPLICABLE

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** INGESTION: Causes vomiting, nausea, and burns to the mouth, throat and gastrointestinal tract. This material can enter the lungs during swallowing or vomiting and cause lung damage which can be harmful.

**HEALTH HAZARDS (ACUTE AND CHRONIC):** See above for acute health hazards.  
CHRONIC-None known.

**CARCINOGENICITY:** NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Those of the respiratory system and skin.

**EMERGENCY AND FIRST AID PROCEDURES:** INHALATION: Remove to fresh air. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen provided a qualified operator is available. Get medical attention. EYE CONTACT: Immediately flush with running water for at least 15 minutes, lifting eyelids periodically to remove contamination. Get immediate medical attention. SKIN CONTACT: Immediately flush with large quantities of water for at least 15 minutes. Remove contaminated clothing and launder before reuse. Get medical attention for irritation or any other symptom. INGESTION: If swallowed immediately give 1 or 2 glasses of water followed by milk of magnesia if available. Call a physician, hospital emergency room or poison control center.

**===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Keep spectators away. Dike and contain spill. Neutralize with baking soda to pH 6-10. Wet vac up or flush to sewer with water or cover with inert material (e.g. sand, earth). Transfer to covered plastic containers for recovery or disposal. Prevent contamination of sewers, streams and groundwater with spilled, unneutralized, concentrated material

**WASTE DISPOSAL METHOD:** The concentrated material, if intended for disposal, is a RCRA hazardous corrosive waste due to pH. Disposal of unneutralized material or its container requires compliance with applicable labeling, packaging, and recordkeeping standards. Extreme care should be taken to ensure that it is disposed of only in a facility permitted for disposal of hazardous waste. Diluted or neutralized product with a pH below 12.5 is not a hazardous waste unless contaminated.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

Use with adequate ventilation. DO NOT MIX WITH OR ALLOW CONTACT WITH BLEACH OR OTHER CHLORINE BEARING COMPOUNDS AS TOXIC GASSES MAY BE RELEASED.

**OTHER PRECAUTIONS:** Avoid skin and eye contact. Do not breathe spray mist. Keep out of reach of children.

===== **SECTION VIII - CONTROL MEASURES** =====

**RESPIRATORY PROTECTION:** If airborne exposure limits are exceeded, use a NIOSH approved cartridge respirator or gas mask suitable to keep airborne mists and vapor concentrations below the time weighted threshold limit values. When using in poorly ventilated and confined spaces, use a fresh-air supplying respirator or a self-contained breathing apparatus.

**VENTILATION:** General mechanical ventilation or local exhaust should be suitable to keep vapor concentrations below required levels(see Section II).

**PROTECTIVE GLOVES:** Impermeable chemical handling gloves for skin protection.

**EYE PROTECTION:** Use chemical resistant goggles, and faceshields.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eyewash facility and safety shower.

**WORK/HYGIENIC PRACTICES:** Wash thoroughly after handling.

===== **SECTION IX - DISCLAIMER** =====

The information contained herein is based on data considered to be accurate. While the information is believed to be reliable, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. It is the user's obligation to evaluate this information and determine the conditions of the safe use of the product.