# NU FLO

Material Safety Data Sheet

## SECTION I - COMPANY IDENTIFICATION

**PRODUCT:** **NU FLO**

**CAT. NO.:** **NF1, NF2**

**MANUFACTURED BY:** **SMD Research, Inc.**
**9836B Sandalfoot Blvd.**
**Boca Raton, FL 33428**

**TELEPHONE NUMBERS:**
Office. **1-561-883-3529**
Emergency Only **1-888-242-7400**

## SECTION II - HAZARDOUS INGREDIENTS

| OSHA Hazardous Components (29 CFR 1910.1200) | EXPOSURE LIMITS: 8 HR. TWA OSHA PEL | ACGIH TLV |
|---|---|---|
| Ethylene glycol monobutyl ether (CAS# 111-76-2) | 25 ppm (skin) | 25 ppm (skin) |
| Dodecylbenzene sulfonic acid (CAS# 27176-87-0) | NE | NE |

## SECTION III - HAZARDS IDENTIFICATIONS

**EMERGENCY OVERVIEW:** WARNING! Eye and skin irritant Harmful if swallowed or inhaled

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:** Inhalation of vapors in high concentration may cause headache, nausea, vomiting
**EYE CONTACT.** Irritation develops immediately on contact.
**SKIN CONTACT:** Irritation develops on contact.
**INGESTION:** Harmful if swallowed May cause headache, nausea, vomiting

**CHRONIC Effects:** Not established

**NOTE:**

**CARCINOGENICITY:** LISTED IN NTP? No IARC? No OSHA Regulated? No

## SECTION IV - FIRST AID MEASURES

**INHALATION:** Remove victim to fresh air and, if needed, immediately begin artificial respiration Give oxygen if breathing is labored Get emergency medical help Contact a physician immediately
**EYE CONTACT:** Flush eyes with water for 15 minutes Get medical attention if symptoms develop and persist
**SKIN CONTACT:** Flush with water or soap and water for 15 minutes or until all traces have been removed Seek medical attention if symptoms develop and persist.
**INGESTION:** Do not induce vomiting Rinse mouth out with water Get immediate medical attention

## SECTION V - FIRE FIGHTING MEASURES

**FLASHPOINT (TEST METHOD).** Not flammable - aqueous solution.
**FLAMMABLE LIMITS:** NA **LOWER:** NA **UPPER:** NA
**AUTOIGNITION TEMPERATURE:** NE

**GENERAL HAZARD:**
**FIRE FIGHTING INSTRUCTIONS:** Approach fire from upwind side. Avoid breathing smoke, fumes, mist, or vapors on the downwind side Firefighters wear protective clothing and self contained breathing apparatus

**EXTINGUISHING MEDIA:** Dry powder, carbon dioxide ($CO_2$), water fog or spray
**HAZARDOUS COMBUSTION PRODUCTS:** Acrid smoke, irritating and toxic fumes of $SO_x$, $H_2S$, $PO_x$

## SECTION VI - ACCIDENTAL RELEASE MEASURES

**LAND SPILL:** SMALL SPILLS. Flush to sewer with large amounts of water. 10 parts water to 1 part product
LARGE SPILLS: Pick up with absorbent media, place in non-leaking containers for proper disposal or reuse
**WATER SPILL:** Notify proper authorities.

*Clean up leaks/spills immediately to prevent soil or water contamination*

## SECTION VII - HANDLING AND STORAGE

**HANDLING:** Avoid contact with skin, eyes, and clothing After handling this product, wash hands before eating, drinking, or smoking If contact occurs, remove contaminated clothing. If needed, take first aid action shown in section IV Launder contaminated clothing before reuse

**STORAGE:** Store away from food stuffs

# NU FLO

## SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Local exhaust ventilation.
**PERSONAL PROTECTION:** Respiratory protection not normally needed under normal conditions of use. Use rubber or latex gloves, chemical goggles or full face shields. Use boots, aprons, drench showers, eye wash as needed for protection against spills and/or splashes

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**VAPOR PRESSURE:** ND
**SPECIFIC GRAVITY ($H_2O$=1):** 1.02
**SOLUBILITY IN WATER:** Complete
**pH:** 11-12
**BOILING POINT:** 212 F
**APPEARANCE & ODOR:** Green liquid.

**VAPOR DENSITY (Air=1):** ND
**EVAPORATION RATE (BuAc=1):** <1
**VOC (G/L):**
**FREEZING POINT:** ND

## SECTION X - STABILITY AND REACTIVITY

**STABILITY:** Stable
**CONDITIONS TO AVOID:** High temperatures
**MATERIALS TO AVOID:** Oxidizers
**HAZARDOUS DECOMPOSITION PRODUCTS:** $SO_x$, $H_2S$, $PO_x$ and from combustion - smoke and toxic fumes
**HAZARDOUS POLYMERIZATION:** Will not occur

## SECTION XI - TOXICOLOGICAL INFORMATION

| | | | | |
|---|---|---|---|---|
| Ethylene Glycolmonobutylether | TDLo | 600 mg/kg | (oral - wmn) | |
| | TCLo | 195 ppm/8hr | (inh - human) | GIT |
| | TCLo | 100 ppm | (inh - human) | NOSE, EYE, CNS |
| | LD50: | 470 mg/kg | (oral - rat) | |
| | LC50: | 2900 mg/m$^3$ | (inh - rat) | |
| Dodecyl benzene sulfonic acid | LD50: | 50-500 mg/kg | (oral - mouse) | |

## SECTION XII - ECOLOGICAL INFORMATION

| | | |
|---|---|---|
| Harmful to aquatic life in very low concentrations | Ethylene Glycolmonobutylether | 1000 ppm / 24 hr / brine shrimp / TLm |
| | Dodecyl benzene sulfonic acid | 5 - 15 ppm / guppy / lethal conc |

## SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose as hazardous waste. Classification and documentation is required before disposal. Follow all local, state and federal regulations

## SECTION XIV - TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Not regulated if container holds less than 1175 gallons

**HAZARD CLASS:** NA
**IDENTIFICATION NUMBER:** NA
**DOT Emergency Guide #:** NA
**Reportable Quantity (RQ):** 1175 gallons (dodecyl benzene sulfonic acid)
**International:** NA

## SECTION XV - REGULATORY INFORMATION

**TSCA (Toxic Substance Control Act):** Components of this product are listed on the TSCA Inventory
**CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):**
Reportable quantity is 1175 gallons (dodecyl benzene sulfonic acid). Contact local authorities for other reporting requirements

**SARA TITLE III (Superfund Amendments and Reauthorization Act):**
Section 313: Ethylene Glycol Monobutyl Ether (a glycol ether) <10%

**CALIFORNIA PROPOSITION 65:** Not listed

## SECTION XVI - OTHER INFORMATION

State Right-to-Know Programs: MA, NJ, PA

NFPA Ratings
Health: 1
Flammability: 0
Reactivity: 0
HMIS Protective Equipment: X See your supervisor

Prepared by: **SMD Research, Inc.** revised **10/15/98**

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