

200 Yellow Place · Rockledge, FL 32955

PH: (321) 631-3550 · FAX: (321) 631-3552

E-mail: info@mainstream-engr.com

## MATERIAL SAFETY DATA SHEET

PREPARATION DATE: 03/20/2002  
REVISION DATE: 01/23/2006 REV. 1

### SECTION 1 – PRODUCT & COMPANY INFORMATION

**PRODUCT NAME:** puraclean  
**PRODUCT NO.:** QT2700 and CQ700  
**DESCRIPTION:** HVAC air filter spray  
**USE:** Enhance air filter performance  
**APPEARANCE:** Colorless liquid

**MANUFACTURER:** Mainstream Engineering Corp.  
200 Yellow Place  
Rockledge, Florida 32955

**INFORMATION TELEPHONE:** 321-631-3550  
**EMERGENCY TELEPHONE:** 321-631-3550

### SECTION 2 – PRODUCT COMPOSITION INFORMATION

COMPONENT	COMPOSITION	% BY WEIGHT
Water	*	85%
Active Ingredient	*	15%

\* TRADE SECRET - PROPRIETARY FORMULA. Specific chemical identities are withheld as a trade secret under the provisions of OSHA hazard communication standard 29 CFR 1910.1200.

### SECTION 3 – HAZARDS IDENTIFICATION

**EXPOSURE LIMITS:** None established by OSHA, ACGIH, or UCC.

#### PRECAUTIONARY STATEMENTS:

Causes eye burns.  
Harmful if swallowed.  
Causes skin irritation.  
Aspiration may cause lung damage.

#### POTENTIAL HEALTH EFFECTS:

**Eye:** Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, marked redness and swelling of the conjunctiva, and chemical burns of the cornea. Iritis may occur.

**Skin:** Brief contact is not irritating. Prolonged or repeated contact may cause discomfort and local redness. No evidence of harmful effects of skin absorption from available information.

**Ingestion:** May cause abdominal discomfort, nausea, vomiting, and diarrhea. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

**Inhalation:** Mist may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing.

### SECTION 4 - EFFECTS OF OVEREXPOSURE

No adverse effects of overexposure anticipated from available information. A knowledge of the available toxicity information and of the physical and chemical properties of the material suggests that overexposure is unlikely to aggravate existing medical conditions.

### SECTION 5 - EMERGENCY & FIRST-AID PROCEDURES

**SKIN:** Remove contaminated clothing. Wash exposed area with soap and water. Obtain medical attention if irritation persists. Launder clothing before reuse.

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. DO NOT remove contact lenses, if worn. Get medical aid immediately, preferably from an ophthalmologist.

**INGESTION:** If patient is fully conscious, give two glasses of fresh water. DO NOT INDUCE VOMITING. Obtain medical attention.

**INHALATION:** If symptoms develop, remove to fresh air.

**NOTES TO PHYSICIAN:** There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (e.g., gastric lavage after endotracheal intubation).

### SECTION 6 - PHYSICAL AND CHEMICAL DATA

**PHYSICAL STATE:** Liquid

**APPEARANCE:** Colorless

**ODOR:** Slight odor

**pH:** 4.1

**BOILING POINT:** 100°C

**VAPOR PRESSURE:** 760 mm Hg at 25°C

**VAPOR DENSITY (AIR = 1):** Not determined

**SPECIFIC GRAVITY (WATER = 1):** 1

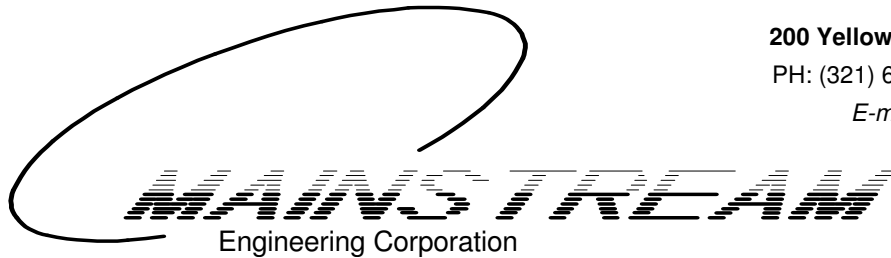
**PERCENT VOLATILES:** 85%

**EVAPORATION RATE:** Not Determined

**FREEZING POINT:** Not Determined

**SOLUBILITY IN WATER:** Completely soluble

### SECTION 7 – REACTIVITY DATA



200 Yellow Place · Rockledge, FL 32955

PH: (321) 631-3550 · FAX: (321) 631-3552

E-mail: [info@mainstream-engr.com](mailto:info@mainstream-engr.com)

**CHEMICAL STABILITY:** Stable.

**CONDITIONS TO AVOID:** Prolonged excessive heat may cause product decomposition.

**INCOMPATIBILITIES WITH OTHER MATERIALS:**

Normally unreactive, however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION 8 - FIRE AND EXPLOSION INFORMATION

**FLASH POINT:** None

**FLAMMABILITY LIMITS:** Not determined.

**AUTOIGNITION TEMPERATURE:** Not currently available.

**EXTINGUISHING MEDIA:** Non-flammable (aqueous solution). After water evaporates, remaining material will burn. Apply alcohol-type or all-purpose-type foam by manufacturer's recommended techniques for large fires. Use water spray, carbon dioxide or dry chemical media for small fires.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Burning can produce the following products: carbon monoxide and/or carbon dioxide. Carbon monoxide is highly toxic if inhaled. Carbon dioxide in sufficient concentrations can act as an asphyxiant.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus and protective clothing.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** This material may produce a floating fire hazard.

## SECTION 9 - HANDLING, STORAGE, AND DISPOSAL

**SPILLS/LEAKS:** Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to suitable containers for recovery or disposal. To avoid gelling and foaming problems, do not use water to flush away spills. Wear suitable protective equipment. Floor may be slippery. Avoid discharge to natural waters.

**HANDLING:** Keep container closed. Use with safety glasses. Wash thoroughly and immediately after handling or wear gloves. Use only in a well ventilated area. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**STORAGE:** Store in accordance with good industrial practices.

**DISPOSAL:** Dispose of in a manner consistent with federal, state, and local regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

## SECTION 10 - TOXICOLOGICAL INFORMATION

**LD50:** rat; female: 707 mg/kg. Rat; male: 500 mg/kg.

**CARCINOGENICITY:** Contains 1,4-dioxane and ethylene oxide which are known to be a human carcinogen.

**REPRODUCTIVE EFFECTS:** Contains 1,4-dioxane and ethylene oxide which are known to the State of California to cause birth defects or other reproductive harm.

**ECOTOXICITY:** May be harmful to aquatic organisms. Fish toxicity: LC50 (96 hr) fathead minnow 8.9 mg/l; NOEC (96 hr) fathead minnow 3.2 mg/l. Aquatic invertebrate toxicity: LC50 (48 hr) daphnia 26 mg/l; NOEC (48 hr) daphnia 18 mg/l. Micro-organism toxicity: bacterial inhibition IC50 5000 mg/l.

**ENVIRONMENTAL FATE:** Has a 5 day Biological Oxygen Demand (BOD) of 30%. Has a Chemical Oxygen Demand (COD) of 2.19 mg/mg.

## SECTION 11 - ADDITIONAL INFORMATION

**EPA TSCA:** All ingredients listed on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**FEDERAL//STATE//LOCAL REGULATIONS:** The following components of this product are listed as either hazardous substances or toxic chemicals in 40 CFR Parts 302.4, 355, and 372 and are present in levels which could require reporting: glycol ethers ( $\leq 0.30\%$ ), 1,4-dioxane ( $\leq 0.0008\%$ ), ethylene oxide ( $\leq 0.1112\%$ ).

**DOT:** The chemicals and/or the quantities in this product are not regulated by DOT.

The information contained herein is believed to be accurate and is offered in good faith. The above information is, in part, based on material safety data sheets supplied by the vendors of the raw materials used in this product. Because product use is beyond our control, no warranty is given, expressed, or implied. Mainstream Engineering Corporation cannot assume any liability for the use of information contained herein or from damage resulting from handling or contact with the above product. To determine applicability or effect of any law or regulation with respect to the product, users should consult a legal advisor or appropriate governmental agency.