

# MSDS (Material Safety Data Sheet)

Pg. 1 of 3

EMERGENCY TELEPHONE NO.: 800-255-3924

INTERNATIONAL EMERGENCY ACCESS No.: +01 or +001-813-248-0585

PRODUCT NAME: **FR Eco-Additive 20™**

CHEMICAL FAMILY: Intumescent Fire Retardant Additive.

## SECTION I - PRODUCT INFORMATION

**MANUFACTURER'S NAME: AVTEC INDUSTRIES, INC.**

*9 KANE INDUSTRIAL DRIVE*

*HUDSON, MA 01749 USA*

**TELEPHONE # FOR INFORMATION: 978-562-2300**

## SECTION II - HAZARDOUS COMPONENTS

<u>Component</u>	<u>CAS No</u>	<u>Percent</u>	<u>Hazardous</u>
Fire retarding additive mixture	None	100	
Graphite intercalation compound	72208-04-9	20.0	
Crystalline Silica (Quartz) *cancer	14808-60-7	0.0-0.8	
Sulfuric Acid residue	7664-93-9	0.02-0.08	
Nitric Acid residue	7697-37-2	0.0-0.6	

Amount of dust varies with the sizing of the product.  
May contain free silica. Do not breathe dust. Follow  
OSHA standards for crystalline silica. (Quartz). There  
is evidence that inhaled crystalline silica is a human  
Carcinogen.

XRD WT%  
TOTAL  
Quartz  
Typical  
0.0-0.8

NOTE: No Additional Hazardous Components as defined by OSHA 29 CFR 1910.1200.

## SECTION III - PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Grey. Solid. Possible slight acidic odor.

MOLECULAR WEIGHT: Not Applicable.

BOILING POINT: (DEGREES FAHRENHEIT): Not Applicable.

MELTING POINT: (DEGREES FAHRENHEIT): Not Applicable.

VAPOR PRESSURE: (mm of Mercury): Not Determined

SPECIFIC GRAVITY (WATER=1): Not Applicable

VAPOR DENSITY (AIR=1): Not Applicable

PERCENT VOLATILE: (BY WEIGHT): Not Applicable.

pH: (Not Applicable)

SOLUBILITY IN WATER: Trace amount if any.  
EVAPORATION RATE: (BUTYL ACETATE=1): Undetermined

---

#### SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT: None  
FIRE EXTINGUISHING MEDIA: Non-combustible. Water, fog, foam, dry chemicals, or CO<sub>2</sub> may be used to combat fire of substrate. Water may be used to flush spills away from material in surrounding fire and to dilute spills, quench heat and render fire to substrate less aggressive.  
EXPLOSIVE LIMITS (PERCENT BY VOLUME): None determined  
SPECIAL FIRE FIGHTING PROCEDURES AND EQUIPMENT: Mixture is non-flammable. Use protective clothing and self contained breathing apparatus with face shield to combat any fire generated from substrate.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: None determined.  
HAZARDOUS COMBUSTION PRODUCTS: Combustion products can include water, carbon dioxide, carbon monoxide, and traces of ammonia.

---

#### SECTION V - REACTIVITY DATA

STABILITY: STABLE   X   UNSTABLE \_\_\_\_\_  
CONDITIONS TO AVOID: Storage of containers in places of excessive heat.  
INCOMPATIBILITY (MATERIALS TO AVOID): Strong Oxidizers  
HAZARDOUS DECOMPOSITION PRODUCTS: May produce carbon monoxide, carbon dioxide, sulfur trioxide, sulfur dioxide, mixed nitrogen oxides.  
HAZARDOUS POLYMERIZATION: Will Occur \_\_\_\_\_ Will Not Occur   X  

---

#### SECTION VI - HEALTH HAZARD INFORMATION

EXPOSURE FROM ROUTINE USE: No evidence of adverse effects from available information.  
EFFECTS OF OVEREXPOSURE: EYES. . . Direct contact or prolonged exposure may cause redness and pain.  
NOSE. . . May cause irritation in the upper respiratory tract. Symptoms of overexposure may include fatigue, confusion, headache, dizziness and drowsiness. Breathing very heavy concentrations of solvent may cause unconsciousness and death. MOUTH. . . Ingestion may cause abdominal spasms and other symptoms that parallel overexposure from inhalation. SKIN. . . Prolonged contact may cause reddening of effected area.  
PROBABLE ROUTES OF EXPOSURE: Skin, eyes, inhalation, and ingestion.  
EMERGENCY AND FIRST AID PROCEDURES:  
EYE CONTACT: Immediately flush eyes with water for at least 15 min. including underneath eyelids. Consult a physician immediately.  
INHALATION: Remove to fresh air immediately. Use adequate ventilation. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.  
INGESTION: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately. If vomiting occurs, keep head below hips to prevent aspiration into lungs.  
SKIN: In case of contact, immediately flush skin with plenty of soap and water.  
CARCINOGENICITY: There is evidence that inhaled crystalline silica (quartz) is a human carcinogen per IARC Monograph 68, 1997. IARC Classification Group 1. Contact Avtec for threshold limit values and PEL's.  
SILICA Listed as Carcinogen by: NTP? Yes. IARC? Yes OSHA? Yes.

---

#### SECTION VII - TOXICITY DATA

ORAL: Practically Nontoxic:LD50 (rat) 5,625mg/kg.  
DERMAL: No more than slightly toxic (rabbit LD50->3,160 mg/kg).  
OTHER PERTINENT DATA: Irritation data: Nonirritating; eye rabbit, slightly irritating (rabbit 10.7/110.0)

---

#### SECTION VIII - SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTION EQUIPMENT

PROTECTIVE GLOVES: Wear impervious gloves as necessary to avoid excessive skin contact: i.e. rubber or neoprene.

EYE PROTECTION: Protective glasses or goggles in heavy mist areas.

RESPIRATORY PROTECTION (SPECIFY TYPE): For heavy mist exposure use a NIOSH/MSHA approved respirator suitable for use with organic vapors if proper ventilation can not be provided.

OTHER PROTECTIVE EQUIPMENT: Adequate clothing to minimize direct contact with skin.

#### VENTILATION

LOCAL EXHAUST: Use exhaust fans if necessary to control mist or vapor.

MECHANICAL (GENERAL): Normal room ventilation of fans.

SPECIAL: Not applicable.

---

#### SECTION IX - SPILL, LEAK, AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Confine spilled material and absorb on sand, sawdust, earth or other available solids. Sweep and place in a suitable container.

WASTE DISPOSAL METHODS: This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dispose in a suitable land fill where permitted by appropriate government regulations.

---

#### SECTION X - REGULATORY INFORMATION

FDA: No applicable information found.

USDA: No applicable information found.

CPSC: No applicable information found.

TSCA: All components listed

DOT: For domestic transportation purposes, this product is not designated as hazardous material by the U.S. Department of Transportation. Standard labeling and MSDS regulations apply.

LABEL REQUIRED: No special provisions.

IDENTIFICATION NUMBER: Not applicable.

WARNING: No special warnings required.

---

#### SECTION XI - SPECIAL PRECAUTIONS AND COMMENTS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep away from eyes. Do not ingest. Avoid prolonged contact with skin. Wash exposed skin with soap and water. Avoid breathing of mist.

OTHER PRECAUTIONS: Not applicable.

REGISTRATION/CERTIFICATIONS: Not applicable.

**EFFECTIVE DATE: October 21, 2008**

**SUPERSEDES: February 23, 2005**

---

#### ADDRESS:

**AVTEC INDUSTRIES, INC.** 9 Kane Industrial Dr., Hudson, MA 01749 USA  
(978) 562-2300 office, (978) 562-8900 fax. E-mail: [inquires@avtecindustries.com](mailto:inquires@avtecindustries.com)

---