

BARRICADE[®]

FIRE BLOCKING GEL

TECHNICAL DATA

BARRICADE II FIREFIGHTING GEL CONCENTRATE

BARRICADE II FIREFIGHTING GEL CONCENTRATE, when mixed with water, forms an aqueous gel that prevents combustion by holding the applied water on the surface to which it is applied. As heat is applied to the surface of the gel, the gel skins over further, reducing the rate of water evaporation, thus prolonging the effectiveness of the gel coating in preventing combustion. Combustion of the coated surface cannot occur until, and after, all the water in the gel coating has been evaporated.

BARRICADE II is formulated to:

Produce a virtually instantaneous gel when mixed with water through a shear device such as an eductor ahead of the fire nozzle. The gel/water stream from the nozzle may be applied directly to the surface to be protected. By adjusting the concentration of the gel concentrate in the water, the viscosity of the gel coating is easily controlled to produce gels of variable thickness that will adhere to horizontal, sloping or vertical surfaces, or to the underside of horizontal surfaces. For these applications, coating concentrations range from 1.5% to 4%.

By reducing the concentration of BARRICADE II gel concentrate in the water, thinner fluid coatings can be produced that will flow around and under surfaces such as on trees, bushes and plants. This is particularly advantageous in enhancing the effectiveness of firebreaks. For these applications, coating concentrations range from 0.5% to 1.5%.

Physical / Chemical Properties of BARRICADE II Gel Concentrate

Description: Off-white dispersion with bland odor.

Viscosity: 4800 cps,

pH of product: N/A pH (2.5 % in water): 7

Flash Point > 500 degrees F

Specific Gravity: 1.13

Corrosivity: none

Low temperature stability and recovery: BARRICADE II thickens significantly below 5 degrees F but recovers completely on warming.

Spills of BARRICADE II CONCENTRATE render surfaces extremely slippery, particularly when wetted.

IMPORTANT! Barricade II must be thoroughly shaken at least once every six months during storage and immediately prior to use.

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| <p>MATERIAL SAFETY DATA SHEET</p> |
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IDENTITY (AS USED ON LABEL AND LIST):
BARRICADE II FIRE BLOCKING GEL

SECTION I- MANUFACTURER'S INFORMATION

BARRICADE INTERNATIONAL, INC.
12848 S.E. SUZANNE DRIVE
HOBE SOUND, FLORIDA 33455

EMERGENCY TELEPHONE NUMBER
(800) 201-3927

TELEPHONE NUMBER FOR INFORMATION
(772) 546-5364

DATE PREPARED
JANUARY 7, 2004

SECTION II- HAZARDS IDENTIFICATION

THE PRODUCT RENDERS SURFACES EXTREMELY SLIPPERY, PARTICULARLY WHEN WETTED

SECTION III- PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: N/A
VAPOR PRESSURE (mm Hg.): N/A
VAPOR DENSITY (Air =1): N/A
SOLUBILITY IN WATER: DISPERSABLE
SPECIFIC GRAVITY (H2O=1): 1.13
MELTING POINT: NIL
EVAPORATION RATE (BUTYL ACETATE=1): NIL
APPEARANCE AND ODOR: OFF-WHITE DISPERSION WITH A BLAND ODOR

SECTION IV- FIRE AND EXPLOSION HAZARD DATA

NFPA RATINGS- HEALTH-1; FLAMMABILITY-1; REACTIVITY-0
FLASH POINT (METHOD USED)- >500 DEGREES F (COC)
FLAMMABLE LIMITS- N/A
LEL- N/A
UEL- N/A
EXTINGUISHING MEDIA- DRY CHEMICAL, FOAM, WATER OR WATER SPRAY
SPECIAL FIRE FIGHTING PROCEDURES- NONE
UNUSUAL FIRE AND EXPLOSION HAZARDS- NONE

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SECTION V- REACTIVITY DATA

STABILITY- N/A
UNSTABLE- N/A
CONDITIONS TO AVOID- N/A
STABLE- YES
INCOMPATIBILITY (MATERIALS TO AVOID)- OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION OR BYPRODUCTS- PRODUCT WILL NOT DECOMPOSE DURING STORAGE.
THERMAL DECOMPOSITION MAY PRODUCE NITROGEN OXIDES (NO_x), HYDROCYANIC ACID, CARBON OXIDES.

SECTION VI- HEALTH HAZARD DATA

HMS RATINGS- HEALTH-1, FIRE-1, REACTIVITY-0
ROUTE(S) OF ENTRY- INHALATION ?-YES, SKIN ?-YES, INGESTION ?- YES
HEALTH HAZARDS (ACUTE AND CHRONIC)
INGESTION: PRODUCT WILL SWELL
INHALATION: NO SHORT TERM INHALATION LIMITS
SKIN/EYE: FLUSH AND RINSE, PARTICULARLY FOR EYE CONTACT. USE MILD DETERGENT FOR SKIN AND NON-IRRITATING DETERGENT FOR EYES. NO SIGNIFICANT SKIN REACTION EXPECTED
CARCINOGENICITY: NO
NTP?: NO
IARC MONOGRAPHS?: NO
OSHA REGULATED?: NO
SIGNS AND SYMPTOMS OF EXPOSURE: N/A
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A
EMERGENCY AND FIRST AID PROCEDURES: EYES- FLUSH WITH WATER FOR AT LEAST FIFTEEN MINUTES USING A NON-IRRITATING DETERGENT

SECTION VII- PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED- CONTAIN SPILLS AND PICK UP- USE SAND OR ABSORBENT MATERIALS; AVOID LOSSES TO WATERWAYS

WASTE DISPOSAL METHOD- REVIEW LOCAL REGULATIONS BEFORE CLEANED UP MATERIALS ARE INTRODUCED INTO SEWER SYSTEMS OR WASTE TREATMENT SYSTEMS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING- AVOID EXCESSIVE HEAT IN STORAGE TO MAINTAIN PRODUCT QUALITY

OTHER PRECAUTIONS- SOILED RAGS OR ABSORBENT MATERIALS SHOULD NOT BE KEPT UNDER HIGH TEMPERATURE, CLOSED CONDITIONS IN THE PRESENCE OF OXYGEN

SECTION VIII- CONTROL MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE)- NONE
VENTILATION- N/A
LOCAL EXHAUST- NOT REQUIRED
SPECIAL- N/A
MECHANICAL (GENERAL)- N/A
OTHER- N/A
PROTECTIVE GLOVES- YES
EYE PROTECTION- WEAR SPLASH GOGGLES WHEN HANDLING THE CONCENTRATE
OTHER PROTECTIVE CLOTHING OR EQUIPMENT- WEAR IMPERVIOUS GLOVES AND LONG SLEEVES WHEN HANDLING CONCENTRATE. WASH THOROUGHLY WITH CLEAN WATER TO REMOVE FROM SKIN. USE A GOOD QUALITY, WATER RESISTANT HAND CREAM TO PREVENT DRYING OF THE SKIN.
WORK/HYGENIC PRACTICES- USE GOOD CHEMICAL HANDLING PRACTICES

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SECTION IX- DISPOSAL CONSIDERATIONS

WASTE FROM RESIDUES / UNUSED PRODUCTS: IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

CONTAMINATED PACKAGING : RINSE EMPTY CONTAINERS WITH WATER .CAN BE LANDFILLED OR INCINERATED, WHEN IN COMPLIANCE WITH LOCAL REGULATIONS

SECTION X- TRANSPORT INFORMATION

NOT REGULATED BY DOT

SECTION XI- REGULATORY INFORMATION

ALL COMPONENTS OF THIS PRODUCT ARE ON THE TSCA AND DSL INVENTORIES.

RCRA STATUS- NOT A HAZARDOUS WASTE

HAZARDOUS WASTE NUMBER- NOT APPLICABLE

REPORTABLE QUANTITY (40 CFR 302)- NOT APPLICABLE

THRESHOLD PLANNING QUANTITY (40 CFR 335)- NOT APPLICABLE

SECTION XII- OTHER INFORMATION

PERSON TO CONTACT: REGULATORY AFFAIRS MANAGER

THE INFORMATION PROVIDED IN THIS SAFETY DATA SHEET IS CORRECT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF AT THE DATE OF ITS PUBLICATION. THE INFORMATION GIVEN IS DESIGNED ONLY AS A GUIDANCE FOR SAFE HANDLING, USE, PROCESSING, STORAGE, TRANSPORTATION, DISPOSAL AND RELEASE, AND IS NOT TO BE CONSIDERED A WARRANTY OR QUALITY SPECIFICATION. THE INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS UNLESS SPECIFIED IN THE TEXT.