

# Material Safety Data Sheet



P. O. Box 1528 • MOUNT AIRY, NC 27030-1528  
336-789-9161 • FAX 336-789-9586 • www.NCFI.com

Dalton, GA

Hickory, NC

Mount Airy, NC

Salt Lake City, UT

## PRODUCT IDENTIFICATION

**Trade Name:** All Grades NCFI Spray Foams  
**Chemical Name:** Polyurethane Foam  
**Synonyms:** Urethane Foam

**Chemical Family:** Urethane Polymer  
**Formula:** N/A  
**Date Prepared:** 11/17/09

## INGREDIENTS- HAZARD CLASSIFICATION

Name:	%	TLV/PEL
None.		

## PHYSICAL DATA

**Boiling Point (°F):** N/A  
**Solubility in Water:** Insoluble  
**Appearance and Odor:** Fine-celled foam, normally tan but can be any color, possible amine odor if freshly cut, hardness varies with density.

**Specific Gravity:** 0.007 - 0.32  
**% Volatile by Volume:** 0

## FIRE AND EXPLOSION HAZARD DATA

**Flash Point (test method):** Not applicable. The ignition temperature of rigid polyurethane foam is in the range of 700 - 800°F. The temperature must exceed 300°F for a period of time before the occurrence of degradation, which may lead eventually to self-ignition. At this temperature most solid combustible material will exhibit signs of charring, one of the first steps in ignition.

**Extinguishing Media:** Water, dry chemicals, CO<sub>2</sub>. Use water for larger fires.

**Special Fire Fighting Procedures:** A self-contained breathing apparatus should be worn to protect against toxic and irritating vapors.

**Unusual Fire and Explosion Hazards:** When foam burns it produces a large volume of dense smoke that presents a major hazard in that it can cause panic and disorientation and inhibit ability to escape.

## REACTIVITY DATA

**Stability:** Stable  
**Polymerization:** Will not occur  
**Incompatibility:** None.

**Conditions to Avoid:** N/A  
**Conditions to Avoid:** N/A

**Hazardous Decomposition Products:** When burned; CO, CO<sub>2</sub>, NO<sub>x</sub>, aliphatic fragments, traces of HCN, benzene, toluene; possibly HF, HCl, HBr, oxides of phosphorus.

## HEALTH HAZARD DATA

**Permissible Exposure Limit:** Not Applicable  
**Effects of Overexposure:** Not Applicable  
**First Aid Procedures:** Not Applicable

---

## SPECIAL PROTECTION INFORMATION

---

**Respiratory Protection:** Use dust mask when fabrication dust is in the air.

**Ventilation:** Not Applicable.

**Eye Protection:** Goggles when foam dust is in the air.

**Gloves:** Not Applicable

**Other:** Not Applicable

---

## SPILL OR LEAK PROCEDURES

---

Not Applicable

---

## SPECIAL PRECAUTIONS

---

Where any foam is sprayed in building interiors its exposed surface should be protected from fire hazard by 1/2" Portland cement plaster or 1/2" gypsum board or equivalent. For the prediction of fire hazard in construction, refer to API "Fire Safety Guidelines for Use of Rigid Polyurethane and Polyisocyanurate Foam Insulation in Building Construction" (AX-106). For proper use refer to any of the following codes:

International Building Code, (IBS Chapter 26)  
International Residential Code (IRC, section R316, R806)  
International Energy Conservation Code (IECC, Section 402)  
Southern Standard Building Code, Section 2603  
BOCA Basic Building Code, Section 2603  
ICBO Uniform Building Code, Section 2602

Rigid foam dust from fabricating operations is an irritant and is flammable. Dust should be collected at the point of generation and stray dust should be regularly swept up.

Large amounts of rigid polyurethane foam assembled in one place, such as for processing into finished products or in storage, present a potential fire hazard. Once ignited, these foams may spread flame rapidly and produce intense heat, dense smoke and toxic gases. Raw foam and fabricated items should be stored indoors, away from fabricating operations, and be protected by automatic sprinklers. Access aisles should be maintained between foam piles.

Ignition sources such as smoking materials, naked lights, open flames and exposed heating elements should be kept away from storage and fabricating areas. Scrap foam should not be permitted to accumulate but should be disposed of promptly.

In case of fire, drench the burning foam with water from a fire hose with a spray nozzle.

Fire fighters should use self-contained breathing apparatus.

General fire safety recommendations such as management interest, personnel training, construction, location, alarms, identification of fire causes, house-keeping, smoke-venting, floor drainage, etc., that apply to storage of other combustible materials also apply to the storage of rigid polyurethane foam.