

MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): **Nelson Fire Brick AA0834**
CHEMICAL NAME/CLASS: Polyurethane Foam
SYNONYMS: None
PRODUCT USE: Through Penetration Firestop Brick
SUPPLIER/MANUFACTURER'S NAME: EGS Nelson Firestop
ADDRESS: 4135 S. 100th East Avenue, Suite 100
 Tulsa, Oklahoma 74146

CHEMTREC EMERGENCY NO.: 1-800-424-9300 (United States)
BUSINESS PHONE: (918) 627-5530/(800) 331-7325
DATE OF PREPARATION: October, 2004

2. INGREDIENTS AND EXPOSURE LIMITS

This product is regarded as an "article" as defined under OSHA Regulation 29 CFR 1910.1200 (c). Under normal working conditions and use, the physical form of this product preclude exposure to a hazardous chemical.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: > 800° F / 426° C Flash Point Method: Estimated

AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABLE LIMITS (in air by volume, %):

Lower (LEL): Not applicable.

Upper (UEL): Not applicable.

FIRE EXTINGUISHING MATERIALS: Select fire extinguishing media appropriate for the surrounding area.

Water Spray: YES

Alcohol Foam: YES

Carbon Dioxide: YES

Dry Chemical: YES

Other: Any "ABC" Class.

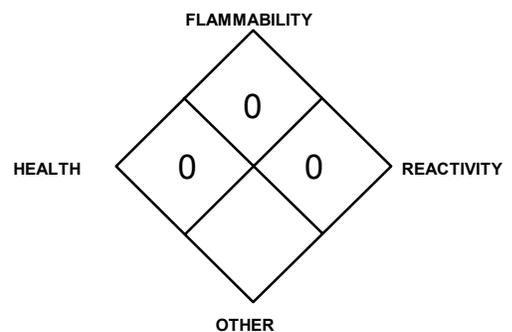
UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is not combustible and does not contribute to the intensity of a fire. When involved in a fire, this material may decompose and produce irritating vapors, acrid smoke, and toxic gases.

Explosion Sensitivity to Mechanical Impact: Not sensitive.

Explosion Sensitivity to Static Discharge: Not sensitive.

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move fire-exposed containers if it can be done without risk to firefighters. If possible, firefighters should control runoff water to prevent environmental contamination. Rinse contaminated equipment with soapy water before returning such equipment to service. No special procedures specific to this product.

NFPA RATING



**See Section 16 for
Definition of Ratings**

4. HANDLING and STORAGE

WORK AND HYGIENE PRACTICES: For industrial use only. Keep out of reach of children. Observe good hygiene practices such as washing after handling and before smoking or eating.

STORAGE AND HANDLING PRACTICES: Store this product in a cool, dry location, away from sources of intense heat.

5. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: No special ventilation and engineering controls are required for use of this product.

RESPIRATORY PROTECTION: None normally required for routine use of this product. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

EYE PROTECTION: Use appropriate eye protection for the work area or the work being performed.

HAND PROTECTION: None normally required for routine use of this product.

BODY PROTECTION: None normally required for routine use of this product.

6. PHYSICAL PROPERTIES

<u>PHYSICAL STATE:</u>	Solid	<u>APPEARANCE:</u>	Charcoal Gray
<u>RELATIVE VAPOR DENSITY (air = 1):</u>	N/A	<u>EVAPORATION RATE (n-BuAc = 1):</u>	N/A
<u>SOLUBILITY IN WATER</u>	Not Soluble	<u>VAPOR PRESSURE, mm Hg @ 20°C:</u>	N/A
<u>pH:</u>	N/A	<u>Odor:</u>	None
<u>Density</u>	0.51 g/cm ³	<u>VOC CONTENT</u>	N/A

7. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: If heated to decomposition, can produce CO_x, NO_x, HCN, HCl and or HF

CONDITIONS TO AVOID: Keep out of reach of children. Observe good hygiene practices such as washing after handling and before smoking or eating.

8. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations or with regulations of Canada and its Provinces. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous.

9. TRANSPORTATION INFORMATION

<u>PROPER SHIPPING NAME:</u>	Not applicable.
<u>HAZARD CLASS NUMBER and DESCRIPTION:</u>	Non-hazardous.
<u>UN IDENTIFICATION NUMBER:</u>	Not applicable.
<u>PACKING GROUP:</u>	Not applicable.
<u>DOT LABEL(S) REQUIRED:</u>	Not applicable.
<u>NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000):</u>	Not applicable.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This material is not considered as dangerous goods by Transport Canada.

IATA DESIGNATION: This material is not considered as dangerous goods by the International Air Transport Association.

UPS SHIPPING: This material is not considered as Hazardous Materials by the United Parcel Service.

10. REGULATORY INFORMATION

Regulatory Chemical Lists:

CERCLA (Comprehensive Response Compensation and Liability Act):

(None present unless listed below)

SARA Title III (Superfund Amendments and Reauthorization Act): This product is classified as an "article" and is not subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).

302 Reportable Ingredients (Identification Threshold 1%): None

11. OTHER INFORMATION

PREPARED BY:

Nelson Firestop Products

DATE OF PRINTING:

October, 2004

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. EGS Nelson assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, EGS Nelson assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

CAS #: This is the Chemical Abstract Service Number which uniquely identifies each constituent.

EXPOSURE LIMITS IN AIR:

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. **TLV** - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (**TWA**), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level (**C**). Skin absorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration.

PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order. **IDLH** - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG - MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (**OSHA**). NIOSH issues exposure guidelines called Recommended Exposure Levels (**RELs**). When no exposure guidelines are established, an entry of **NE** is made for reference.

HAZARD RATINGS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: Health Hazard: **0** (minimal acute or chronic exposure hazard); **1** (slight acute or chronic exposure hazard); **2** (moderate acute or significant chronic exposure hazard); **3** (severe acute exposure hazard; onetime overexposure can result in permanent injury and may be fatal); **4** (extreme acute exposure hazard; onetime overexposure can be fatal). Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38°C [100°F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]). Reactivity Hazard: **0** (normally stable); **1** (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).

NATIONAL FIRE PROTECTION ASSOCIATION: Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure causes death or major residual injury). Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (**NFPA**). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:

Human and Animal Toxicology: Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **LD₅₀** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **LC₅₀** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m³** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TDo**, **LDLo**, and **LDo**, or **TC**, **TCo**, **LCLo**, and **LCo**, the lowest dose (or concentration) to cause lethal or toxic effects. **Cancer Information:** The sources are: **IARC** - the International Agency for Research on Cancer; **NTP** - the National Toxicology Program, **RTECS** - the Registry of Toxic Effects of Chemical Substances, **OSHA** and **CAL/OSHA**. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Sub rankings (2A, 2B, etc.) are also used. **Other Information:** **BEI** - ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. **Ecological Information:** EC is the effect concentration in water. **BCF** = Bioconcentration Factor, which is used to determine if a substance will concentrate in life forms which consume contaminated plant or animal matter. Coefficient of Oil/Water Distribution is represented by **log K_{ow}** or **log K_{oc}** and is used to assess a substance's behavior in the environment.

REGULATORY INFORMATION:

This section explains the impact of various laws and regulations on the material. **U.S.:** **EPA** is the U.S. Environmental Protection Agency. **DOT** is the U.S. Department of Transportation. **SARA** is the Superfund Amendments and Reauthorization Act. **TSCA** is the U.S. Toxic Substance Control Act. **CERCLA (or Superfund)** refers to the Comprehensive Environmental Response, Compensation, and Liability Act. Labeling is per the American National Standards Institute (**ANSI Z129.1**). **CANADA:** **CEPA** is the Canadian Environmental Protection Act. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **TC** is Transport Canada. **DSL/NDL** are the Canadian Domestic/Non-Domestic Substances Lists.