PRODUCT DATA SHEET
FIRETEMP® EBI

Product Description

Firetemp® EBI is an Intumescent solid pad designed to be quickly and easily installed into metallic electrical outlet boxes. The slightly sticky single component pad allows for it to adhere to the inside of any single or double electrical receptacle or switch boxes. The **Firetemp® EBI** pad is inserted against the inside back wall of the box and can be used in 1 or 2 hour rated gypsum wallboard assemblies. When exposed to high temperatures or flames the installed pad will swell and expand up to 24 times quickly filling the box with a char that will close off any openings or gaps, not allowing for the passage of flames. The expanded material will also assist in controlling the temperature rise on the exposed surfaces.

Application/Features

When installed properly the **Firetemp® EBI** intumescent pad will prevent the spread of fire. Used in single and double metallic electrical boxes for one and two hour gypsum wallboard rated wall assemblies. It is a convenient alternative to using the more traditional externally applied putty pads.

- Safe to use, non-toxic
- Simple, fast and easy to install
- Pre-cut to fit standard box sizes
- Highly intumescent, up to 24 times
- Non-conductive
- Water-resistant
- No trimming or patching necessary

Limitations

Firetemp® EBI should be installed by a qualified electrician and in applications as described and tested in manufacturer's literature or UL Fire Resistance Directory-Volume 1.

Installation

Installation to comply with Article 370-16 of the National Electrical Code (NFPA 70). Manufacturer recommends qualified electricians install these pads. Remove any dust, dirt and oil from surfaces with dry cloth. Peel off the protective backing from the pad. Apply to the inside back panel of the metal box making sure the pad is centered. Use one pad only sized correctly to fit either the small or large size outlet box.

** When the ground screw is located on the inside back panel, make a cut in the pad to access and expose the screw. DO NOT REMOVE MATERIAL FROM THE PAD.

Availability

Firetemp® EBI is available in two sizes.

1-13/16" x 3-3/4" x1/4"	(47mm x 95mm x 6.7mm)
3-3/4" x 3-3/4" x 1/4"	(95mm x 95mm x 6.7mm)

Technical Services

For technical information and assistance regarding **Firetemp® EBI** applications, code approvals, and performance specifications, call 1-888-322-1129. Outside of the USA and in Canada, call (604) 515-1788. If this piece is more than year old, please contact Johns Manville for the current information.

MATERIAL SAFETY DATA SHEET

Product Identifier **Firetemp® EBI**
Product Use Electrical Outlet Box Insert
Manufacture Information Johns Manville Insulation Group
Fire Protection Systems
PO Box 5108
Denver, CO
Telephone: 303-978-2000
Internet Address: http//www.jm.com
Emergency Number 1-800-810-1788

INGREDIENT INFORMATION

Ingredient	CAS Number	% (wt.)	LC_{50} (rat)	LD_{50} (rat)	TLV	STEL
Polybutenes Polymers	N/A	15.0 – 30.0	N/A	N/A	N/A	N/E
Calcium Carbonate	1317-65-3	20.0 – 30.0	N/A	N/A	10 mg/M^3	N/E
Natural Graphite	7782-42-5	40.0 – 60.0	N/A	N/A	2.0 mg/M^3	N/E
Sulfuric Acid	7664-93-9	0 – 15.0	N/A	N/A	1 mg/M^3	N/E
Nitric Acid	7697-37-2	0 – 8.0	N/A	N/A	5.2 mg/M^3	N/E

NOTE: THE ACID COMPONENTS OF THIS PRODUCT ARE ENCAPSULATED WITHIN THE NATURAL GRAPHITE MATRIX. THEY DO NOT POSE A HAZARD DURING NORMAL USE OR HANDLING.

PHYSICAL PROPERTIES

Appearance / Physical State	Black, solid	**Specific Gravity (@25°C)**	1.50 – 1.70
Odour	Slight to none	**Evaporation Rate**	N/A
Odour Threshold	N/A	**Boiling Point (°C)**	Not determined
Vapour Pressure (mm Hg)	N/A	**Freezing Point (°C)**	Not determined
Vapour Density (Air = 1)	N/A	**pH**	Not determined
Coefficient of H_2O/Oil Distrib	Not determined	**VOC contents (g/L)**	0

FIRE AND EXPLOSION DATA

Flammability No
Means of Extinction CO_2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special Fire-fighting Procedures Firefighters should wear the usual protective gear use self-contained breathing apparatus.
Auto-ignition Temperature (°C) N/A
Flash Point (°C) / Method 214 (PMCC)
Upper Flammable Limit (%, Volume) N/A
Lower Flammable Limit (%, Volume) N/A
Sensitivity to Mechanical Impact No
Sensitivity to Static Discharge No
Unusual Fire and Explosion Hazards Thermal decomposition or combustion may produce dense smoke, oxides of carbon, sulfur, nitrogen, and low molecular weight organic compounds whose composition has not been characterized. Material volume will increase up to 200 times when exposed to intense heat.

REACTIVITY DATA

Stability Stable at normal condition
Condition of Reactivity Material will expand when exposed to temperature above 150°C.
Incompatible Materials Reacts with strong oxidizing agents
Hazardous Decomposition Products Carbon Monoxide and Carbon Dioxide

TOXICOLOGICAL PROPERTIES

Routes of Exposure	Skin contact Skin absorption Eye contact Inhalation Ingestion
Effects of Acute Exposure to Product	Skin and eye irritation may occur after contact with the product.
Effects of Chronic Exposure to Product	None known
Exposure Limits	N/A
Irritancy of Product	None known
Sensitization of Product	None known
Carcinogenicity	None known
Teratogenicity	None known
Reproductive Toxicity	None known

FIRST AID MEASURES

Eye Contact	Flush with large quantities of water gently for 15 minutes and get medical attention.
Skin Contact	Wash with soap and water.
Inhalation	Remove affected person away from source of exposure to fresh air and get medical attention IMMEDIATELY
Ingestion	Get medical attention IMMEDIATELY.

PREVENTIVE MEASURES

Engineering Controls	Standard industrial ventilation is recommended.
Personal Protective Equipment	General protective and hygienic measures were required during normal use and handling.
Eye Protection (Specify)	Safety glasses with side-shields
Skin Protection (Specify)	Protective work clothing
Respiratory (Specify)	None normally required. However, use a NIOSH / OSHA approved respirator if mist or vapours formation should occur.
Other	

PRECAUTION FOR SAFE HANDLING AND USE

Handling Procedure and Equipment	No special measures required
Storage Requirement	Keep under their original cover at temperature between 2 – 49°C.
Spill, Leak or Releases	Not applicable
Waste Disposal	Care should be taken to ensure that the material or it's containers and disposed of in an approved facility, state, provincial and local regulations.
Special Shipping Instructions	Not determined

REGULATION INFORMATION

WHMIS	D2A, E
HMIS	Health 1, Flammability 0, Reactivity 0, Personal Protection B
TDG Regulation	None known
TSCA	All ingredients of this product are on the inventory list.
DSL	All ingredients of this product are on the list.

PREPARATION INFORMATION

Prepared by	Chemical Laboratory, Passive Fire Protection Partners
Reviewed Date	17 February, 2004
Telephone	(604) 515-1788
Internet Address	http://www.firestop.com
Abbreviations Used	**% (wt.)** = Weight Percentage **ACGIH** = American Conference of Governmental Industrial Hygienists **CAS Number** = Chemical Abstracts Series Number **DSL** = Domestic Substance List in Canada **H** = Hours **HMIS** = Hazardous Material Identification System **IARC** = International Agency for Research on Cancer **LC_{50} =** Lethal Concentration, 50% **LD_{50} =** Lethal Dose, 50% **MSHA** = Mine Safety and Health Administration **N/A** = Not Applicable or Not Available **N/E** = None Established **NIOSH** = The National Institute for Occupational Safety and Health **NTG** = National Toxicology Program **OSHA** = The Occupational Safety and Administration **STEL** = Short Term Exposure Limit **TDG** = Transportation of Dangerous Goods **TLV** = Threshold Limit Value **TSCA** = Toxic Substance Control Act in US **VOC** = Volatile Organic Compounds **WHMIS** = Workplace Hazardous Material Identification System

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.