Technical Data Sheet — Product Name: Heatshield Armor™

Section 1: Applications

Applications: Exhaust pipes, mufflers, DPF's, exhaust headers, exhaust manifold, turbo manifolds. Due to its high quality construction and high temperature capabilities, it may also be used for: Furnace kiln, reformer and boiler lining, Laboratory ovens, Furnace door lining and seals, Furnace repair, Annealing furnace linings, Investment casting mold wrap, Stress - relieving blankets, Reusable steam and gas turbine insulation, Expansion joints packing, High temperature gasketing, Fire protection, Acoustical service, Cryogenic insulation

Industries Served

- Automotive
- Marine
- Heavy Duty
- Power Generation
- Appliance
- Fire Protection
- Foundries
- Marine
- Petrochemical
- Mining

Section 2: Features and Benefits

Heatshield Armor is an in-organic, high-temperature needled blanket alternative to ceramic fiber from Heatshield Products. With an 1800°F/1000°C maximum temperature rating, this bio soluble, vitreous silicate fiber mat can give you the thermal performance you require, without the health and safety concerns that come with other high temp insulations, its improved handling will enhance your fabrication and installation procedures which can help lower overall labor costs.

The safer alternative: Vitreous silicate fiber has been tested for its bio-solubility and IARC Class 3 rated. Please see the SDS Sheet for specific information concerning handling this material

Values & Benefits

- Bio-soluble Fiber
- Easy to stamp into custom shapes
- Low Shot Content
- Won't form Crystobalites

Section 3: Technical Data

Physical Properties

- Color: Off White/Aluminum
- Available Thicknesses: 1/4", 1/2", and 1"
- Standard Widths: 24" & 48"
- Densities: 8 to 10 pc/f
- Foil thickness 0.003"

Chemical Analysis (% weight basis after firing)

- Silicon Oxide: 42%
- Aluminum Oxide: 14%
- Calcium Oxide: 15%
- Magnesium Oxide: 7.5%
- Ferrous Oxide: 0.1%
- Maganese Oxide: 10%
- Other: 3.4%

Thermal Conductivity 1" (BTU-in/hr-ft2 -°F)

- @ 500 ºF (400°C) 0.417
- @ 1000 ºF (600°C) 0.922
- @ 1500 ºF (800°C) 1.690
- @ 1800 ºF (1000°C) 2.270

***Optional configuration with 304 stainless mesh.** Melting point of mesh 2000°F

Meets Coast Guard Spec. 164.009 for Incombustible Materials
Meets ASTM E84 for Incombustible Materials

Thickness listed are in Heatshield Armor's natural state. When stamped, rolled, or shipped, thicknesses may compress. Heatshield Armor's thermal capabilities are not compromised or affected.