



2nd Floor, Savan Mall, Opp. Fun Point Club,
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Factory: Plot No. 457 GIDC, Nr. Ronak Ceramic,
Shobhashan, Mahesna, Gujarat, India.

CLEAR-FLOW™ (H-EP) EXPANDED PERLITE

EXPANDED PERLITE IS AN ECONOMICAL INSULATION FOR HIGH AND LOW TEMPERATURE AND CRYOGENIC APPLICATIONS. IT IS WIDELY USED BECAUSE OF ITS LOW THERMAL CONDUCTIVITY, COST, NON-COMBUSTIBILITY AND LOW MOISTURE RETENTION.

PERLITE LOOSE FILL INSULATION PROVIDES DEPENDABLE RESULTS AT TEMPERATURES RANGING FROM -273 C TO +1000. IT IS WIDELY USED TO INSULATE.....

- COLD BOX OR AIR SEPARATION UNITS.
- STORAGE TANKS CONTAINING ETHYLENE & PROPYLENE.
- LIQUEFIED NATURAL GAS (LNG) IN STORAGE VESSELS AND SHIPS.
- VESSELS STORING ANHYDROUS AMMONIA, PROPANE, LPG AND CHLORINE.
- CRYOGENIC STORAGE VESSELS CONTAINING LIQUID OXYGEN & NITROGEN.

LOW TEMPERATURE AND CRYOGENIC INSULATION :

INCREASED PRODUCTION OF LIQUEFIED GASES HAVING BOILING POINTS AS LOW AS -270 C HAS CREATED A DEMAND FOR STORAGE FACILITIES CAPABLE OF ECONOMICALLY REDUCING EVAPORATION LOSSES. WHILE THE STORAGE VARY AS TO CONFIGURATION, TYPE OF SUPPORTS AND ACCESSORY EQUIPMENT'S, THE MAJORITY OF VESSELS ARE OF DOUBLE WALLED CONSTRUCTION AND THE ANNULUS IS FILLED WITH EXPANDED PERLITE.

ATMOSPHERIC SERVICES :

THE THERMAL CONDUCTIVITY OF EXPANDED PERLITE INSULATION UNDER ATMOSPHERIC PRESSURE CONDITIONS IS DIRECTLY RELATED TO THE DENSITY, WHILE PERLITE GRADING HAS ONLY A MINOR EFFECT ON THERMAL CONDUCTIVITY. EXPANDED PERLITE WILL BREAK DOWN IF SUBJECTED TO EXCESSIVE HANDLING, AND THIS CRUSHING OF PARTICLES WILL RESULT IN INCREASE IN DENSITY AND A HIGHER THERMAL CONDUCTIVITY.

EVACUATED SERVICES :

EXPANDED PERLITE IS ESSENTIALLY NON-HYGROSCOPIC IN NATURE, WHICH MAKES IT SUITABLE FOR USE UNDER VACCUUM CONDITIONS. HERE THE THERMAL CONDUCTIVITY PHENOMENON IS THE REVERSE i.e. HIGHER THE DENSITY LOWER IS THE THERMAL CONDUCTIVITY UNDER VACCUUM CONDITIONS AT LOW PRESSURES.



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PHYSICAL PROPERTIES

• PHYSICAL STATE	FREE FLOWING
• COLOUR	WHITE
• THERMAL CONDUCTIVITY	0.03 - 0.05 w/mk . DEPENDS ON DENSITY
• LOOSE DENSITY	40 – 50 Kg. / Cu.M
• COMPACT DENSITY	55 – 70 Kg. / Cu.M
• MOISTURE	MAXIMUM 0.5 %
• FIRE RESISTANCE	PERLITE IS NON-COMBUSTIBLE
• ORGANIC MATTER	MAXIMUM 0.1 %
• GRADING	RETAINED ON 1.180 mm 10 % MAX. (ASTM 16 MESH SIEVE) RETAINED ON 0.150 mm 80 % MIN. (ASTM 100 MESH SIEVE)
• BIOLOGICAL	ROT PROOF AND VERMIN PROOF

CHEMICAL PROPERTIES

SILICON DIOXIDE %	70.0 TO 76.0
ALUMINIUM OXIDE %	10.0 TO 14.0
FERRIC OXIDE % (max)	0.40
FERROUS OXIDE % (max)	0.50
CALCIUM OXIDE %	0.50
MAGNESIUM OXIDE %	0.20
SODIUM OXIDE %	3.0 TO 4.0
POTASSIUM OXIDE %	4.0 TO 5.0
ORGANIC MATTER %	NIL
pH OF 10% SLURRY IN WATER	6.5 TO 8.0

NB: The specifications and information given herein are in good faith, but without warranty.