Trade Name: GoodTemp

Section 1— Chemical Product and Company Identification

Material Description: Bonded Expanded Perlite Pipe and Block Thermal Insulation
Product Use: Thermal Insulation for Piping and Equipment

Manufacturer Information
Howred Corporation
7887 San Felipe, Suite 122
Houston, TX 77063
Information Phone: 713-781-3980
Emergency Phone: 1-800-535-5053 (North America) or +01-352-323-3500 (International)

Section 2 — Hazards Identification

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015)

Not a hazardous mixture.

Hazard Statements
H320, H316, H335 Irritating to eyes, respiratory system and skin

Precaution Statements
P261 Avoid breathing dust
P280 Wash thoroughly after handling
P313 Get medical advise for eye or skin irritation

Emergency Overview
This product is an article and under normal conditions of use, this product does not pose any unusual physical hazard or health risk. Altering the material by cutting, sawing, or abrading will release material that may increase the risk of personnel exposure.

Inhalation of dust created when fabricating, cutting, or other mechanical alterations of the product may cause temporary upper respiratory irritation and/or congestion, remove affected individuals to fresh air.

Rubber gloves are not normally required but may be worn to reduce skin irritation. Skin irritation may be treated by gently washing affected area with soap and warm water.

Safely glasses and/ or goggles should be worn to reduce the possibility of eye irritation. Eye irritation may be treated by flushing eyes with large amounts of water. If irritation persists, contact a physician. A NIOSH or MSA approved respirator may be used to reduce nuisance dust. Prolonged contact with dust from this product may cause Dermatitis.

In the event of fire, use normal fire-fighting procedures to prevent inhalation of smoke and gases.
WHMIS Class: Goodtemp is not a WHMIS controlled product.

Potential Health Effects

Summary

- Breathing dust from this product may cause a scratchy throat, congestion, and slight coughing.
- Getting dust or fibers on the skin, or in the eyes may cause itching, rash, or redness.
- Breathing large amounts of dust or fibers from this product may lead to chronic health effects as discussed in Section 11.

Inhalation

Irritation of the upper respiratory tract (scratchy throat), coughing, and congestion may occur in extreme exposures.

Skin

Temporary irritation (itching) or redness may occur.

Absorption

Not applicable

Ingestion

This product is not intended to be ingested or eaten under normal conditions of use. If ingested, it may cause temporary irritation to the gastrointestinal (GI) tract, especially the stomach.

Eyes

Temporary irritation (itching) or redness may occur.

Target Organs

Upper respiratory passages, skin, and eyes.

Primary Routes of Entry (Exposure)

Inhalation (breathing dust), skin, and eye contact.

Medical Conditions Aggravated by Exposure

Pre-existing chronic upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma.

OSHA classifies perlite as "particulate not otherwise regulated" (PNOR) and concludes perlite is a non-toxic when airborne total particulate concentrations are maintained at level so 15 mg/m³ or below and when its quartz content is limited to a level less than 1% crystalline silica

Perlite has not been listed as a carcinogen by NTP or OSHA.

Section 3 — Composition/Information on Ingredients

Component	CAS#	EINECS#	Percent
Expanded Perlite	93763-70-3		50 - 95
Sodium Silicate	1344-09-8	215-687-4	1 – 40
Clay	1322-58-7	310-194-1	1 – 50
Iron Oxide	1309-37-1	215-168-2	0 – 3
Continuous Filament Glass Fiber	65997-17-3	266-046-0	0 – 3
Dimethylpolysiloxanes	94363-18-5	256-344-9	0 - 10

Section 4 — First-Aid Measure

Inhalation
Remove to fresh air. Drink water to clear throat, and blow nose to remove dust.
Skin
Wash gently with soap and warm water to remove dust. Wash hands before eating or using the restroom.
Ingestion
Product is not intended to be ingested or eaten. If this product is ingested, irritation of the gastrointestinal (GI) tract may occur and should be treated symptomatically. Rinse mouth with water to remove fibers, and drink plenty of water to help reduce the irritation. No chronic effects are expected following ingestion.
Eyes
Do not rub or scratch your eyes. Dust particles may cause the eye to be scratched. Flush eyes with large amounts of water for 5-15 minutes. If irritation persists, contact a medical professional.
Notes to Physician
This product is a mechanical irritant and is not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

Section 5 — Fire Fighting Measures

Flash Point:	NA	**Method Used:**	NA
Upper Flammable Limit (UFL):	NA	**Lower Flammable Limit (LFL):**	NA
Auto Ignition:	NA	**Flammability Classification:**	Noncombustible
Rate of Burning:	NA		

NA= Not Applicable

General Fire Hazard
There is no potential for fire or explosion.
Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Equipment/Instructions
No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases produced by other materials.

Section 6 — Accidental Release Measures

Containment Procedures
Spilled material should not be walked on. Do not dry sweep dust accumulation or use compressed air for clean-up. These procedures will help to minimize potential exposures.
Clean-Up Procedures
Pick up large pieces. Vacuum dusts. If sweeping is necessary, use a dust suppressant such as water. Wastes are not hazardous as defined by RCRA; 40 CFR 261. Comply with state and local regulations for disposal of these products. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.

Section 7 — Handling and Storage

Handling Procedures
Use protective equipment as described in Section 8 of this material safety data sheet when handling uncontained material. Good housekeeping practices should be used to prevent generation and accumulation of dusts. After handling product, wash face and hands before eating, drinking, or smoking.

Storage Procedures
Store in a dry area. Repair any broken or damaged containers. Material should be kept dry, and protected from the weather.

Section 8 — Exposure Control and Personal Protection

Expanded Perlite
OSHA – Respirable fraction: 5mg/m³ TWA (Respirable) total dust:15 mg/m³
ACGIH – 10mg/m³ TWA
This is the value for particulate matter containing no Asbestos and <1% crystalline silica and are related to PNOC, Particles Not Otherwise Classified.

Sodium Silicate
OSHA – Respirable fraction; 5 mg/m³ TWA total dust; 15 mg/m³ TWA
ACGIH – Inhalable particulate: 10 mg/m³ TWA Respirable particulate: 3 mg/m³ TWA
Related to Particles Not Otherwise Regulated.

Iron Oxide
OSHA – 10 mg/m³ TWA
ACGIH – 5 mg/m³ TWA

Continuous filament glass fiber
OSHA – 5 mg/m³ TWA respirable fraction total dust: 15 mg/m³ TWA
ACGIH – 1 f/cc TWA for fibers longer than 5 um with a diameter less than 3 um; 5 mg/m³ TWA respirable particulate; (Listed under 'Synthetic vitreous fibers')

Eyes/Face
Safety glasses with side shields are recommended to keep dust out of the eyes.

Skin
Rubber, leather or cotton gloves should be worn to prevent skin contact and irritation. Barrier creams may also be used to reduce skin contact and irritation.

Respiratory
A respirator should be used if ventilation is unavailable, or is inadequate for keeping dust and fiber levels below the applicable exposure limits. In those cases, use a NIOSH-certified disposable or reusable particulate respirator with an efficiency rating of N95 or higher (42 CFR 84) when working with this product. For exposures up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher; and for exposures up to ten times the established exposure limits use a half-mask respirator (e.g., MSA's DM-11, Racal's Delta N95, 3M's 8210), rated N95 or higher. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher. Operations such as sawing, abrasion, tear out, and spraying may generate airborne fiber concentrations requiring a higher level of respiratory protection.

Ventilation
In fixed manufacturing settings, local exhaust ventilation should be provided at areas of cutting to remove airborne dust and fibers. General dilution ventilation should be provided as necessary to keep airborne dust and fibers below the applicable exposure limits and guidelines. The need for ventilation systems should be evaluated by a professional industrial hygienist, while the design of specific ventilation systems should be conducted by a professional engineer.

General
Loose-fitting, long-sleeved clothing should be worn to protect the skin from irritation. Exposed skin areas should be washed with soap and warm water after handling.

Section 9 — Physical & Chemical Properties

Appearance: Semi-circle or block insulation with pink coloring throughout as a visual marker to indicate this is an asbestos free product. NA = Not applicable

Odor:	Odorless	**pH:**	NA
Physical State:	Solid	**Vapor Density:**	NA
Vapor Pressure:	NA	**Melting Point:**	>1800°F
Boiling Point:	NA	**Specific Gravity:**	<1
Solubility (H2O):	Nil	**Freezing Point:**	NA
Viscosity:	NA	**Evaporation Rate:**	NA
VOC:	0, None	**Percent Volatile:**	0, None

Section 10 — Chemical Stability & Reactivity Information

Chemical Stability
This is a stable material. This product is not reactive.
Conditions to Avoid
Avoid contact with Hydrofluoric Acid
Hazardous Decomposition
None identified
Hazardous Polymerization
Will not occur, non-reactive

Section 11 — Toxicological Information

Acute Toxicity
A: General Product Information
The primary acute health effects of this product include mechanical irritation of the skin and eyes and skin dryness as a result of contact with dust and fibers.
B: Component Analysis - LD50/LC50 for Chemicals that May be Released During Use
Only water vapor is released during use.
No LD50/LC50's are available for this product's components.
Carcinogenicity
A: General Product Information
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA, NTP, IARC, or ACGIH.

B: Component Carcinogenicity
Perlite (93763-70-3)
ACGIH: A4 - Not Classifiable as a Human Carcinogen

Sodium Silicate
IARC – Group 3: Not classifiable as to it carcinogenicity to humans.
Not list by IARC, NTP, or OSHA as a carcinogen.

Continuous filament glass fiber
ACGIH - A4 – Not Classified as a Human Carcinogen (related to filament glass fibers)
IARC - Monograph 43, 1988, related to glass filaments, Group 3, not classified to its carcinogenicity to humans. No chronic health affects are known to be associated with exposure to continuous filament fiber glass. Results from epidemiological studies have not shown any increases in respiratory disease or cancer. . Because fo the large diameter of continuous filament fibers, these fibers on not considered respirable.

Ozone- Depletion
Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B)

Section 12 — Ecological Information

Ecotoxicity
A: General Product Information
No data available for this product. This material is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
B: Component Analysis - Ecotoxicity - Aquatic Toxicity
No ecotoxicity data are available for this product's components.

Section 13 — Disposal Considerations

A: General Product Information
This product, as supplied, is not regulated as a hazardous waste by EPA under RCRA regulations. Comply with state and local regulations for disposal. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.
B: Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.
Disposal Instructions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 — Transport Information

US DOT Information
This product is not classified a hazardous material for transport.
DOT Label: None Required
Canadian Shipping Description: None
UJN/NA#: None
IMO: Not regulated as dangerous goods according to IMDG Code

ICAO: Not regulated as dangerous goods according to ICAO Technical Instructions

Section 15 — Regulatory Information

US Federal Regulations

A: General Product Information

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

B: Component Analysis

None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

A: General Product Information

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65). This product does not require a warning under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

Other Regulatory Information

A: General Product Information

No information available for the product.

B: TSCA Status

All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

Section 16 — Other Information

This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

NFPA	HMIS	Rating Scale
1 – Health	1 – Health	0 Least
0 – Flammability	0 – Flammability	1 Slight
0 – Reactivity	0 – Physical Hazard	2 Moderate
0 – Other Hazard	E -- Personal Protection	3 High
		4 Severe

Key/Legend:

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act; DSL = Canadian Domestic Substance List; EINECS = European Inventory of New and Existing Chemical Substances; WHMIS = Workplace Hazardous Materials Information System; CAA = Clean Air Act; CHPA = Canadian Hazardous Product Act; IDL = Canadian Hazardous Disclosure List

Revision Summary:
This is a revised MSDS which replaces the previous document dated 21-January-2014. There were only minor wording revisions.

IMPORTANT SAFETY NOTICE: The information in this Safgety Data Sheet (SDS) relates only to the specific material described herein and does not relate to use in combination with any other material or substance or in any process. Because of the use of this information and the conditions of use of this product are not within the control of Howred Corporation, it is the users obligation to determine the conditions of safe use of this product. Users of this product should study this SDS and become aware of the product hazards and safety information before using this product. Users should also notify their employees, agents, and contractors regarding information contained in this SDS and any product hazards and safety information in order to provide for safe use of this product.

Prepared by TSRK Enterprises Inc. for Howred Corporation

END of SDS