SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Type: Malarkey Oxidized Asphalt Cap Sheet

SKU Number/Trade Name:
502 Pano™ Cap

Use: Low Slope BUR Cap Sheet

Manufacturer:
Malarkey Roofing Products
P.O. Box 17217
3131 N. Columbia Blvd.
Portland, OR 97217
Phone: 503-283-1191
www.malarkeyroofing.com

Emergency Contact:
CHEMTREC®: 1-800-262-8200 (24 HOUR)

2 HAZARD(S) IDENTIFICATION

Signal Word: WARNING
Carcinogenicity: Category 2A
Skin Irritation: Category 2

GHS CLASSIFICATION

HAZARD STATEMENTS

- Causes skin and eye irritation.
- May cause an allergic skin reaction.
- Causes damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS

- Read instructions before use.
- Use in a well-ventilated area.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust.
- Wear proper *Personal Protective Equipment* including gloves, protective clothing, eye protection, face protection, and respirator where appropriate.
- Do not eat, drink or smoke when using this product.
- Thoroughly wash hands and exposed skin after handling.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	Ingredient %
Asphalt, Oxidized	64742-93-4	15 - 25
Limestone	1317-65-3	25 - 35
Fiberglass Mat		
Fiberglass	65997-17-3	3 - 8
Urea Formaldehyde Binder	9011-05-6	0 - 0.003
Backing Sand	14808-60-7	0 - 10
Mineral Granules	Mixture	25 - 35

4 FIRST-AID MEASURES

Eye contact: Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.
Skin contact: Clean any exposed skin with warm soapy water if possible. If not, and a waterless hand cleaner is used, it should be without pumice. Do not use solvents or thinners to remove material from skin. Get medical attention if irritation persists or develops.
Ingestion: If swallowed, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis. Call poison control center or get immediate medical attention.
Inhalation: If inhalation of dust occurs, remove person to fresh air. Drink water to clear throat or blow nose to clear. If not breathing, give artificial respiration or give oxygen by trained personnel and get immediate medical attention.
Notes to physician: Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

5 FIRE-FIGHTING MEASURES

Flash point: 525°F minimum (274°C), Cleveland Open Cup
Auto-ignition temperature: >650°F
Extinguishing media: Dry chemical, CO_2, or foam fire extinguisher should be used for controlling small fires. Avoid use of straight-stream water.
Special firefighting procedures: Avoid breathing fumes. Firefighters should wear NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.
Unusual fire or explosion hazards: When heated, fumes may burn if ignition source is provided. Petroleum asphalt fumes can explode if emitted in an enclosed environment and supplied with an ignition source. Burning product will cause thick black smoke.
Hazardous combustion products: Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons during heating or burning. These combustion products are not expected unless product is heated or burned.

6 ACCIDENTAL RELEASE MEASURES

Precautions if material is spilled or released: Pick up large pieces. Leather or cotton gloves must be worn when handling. Do not dry sweep dusts or blow with compressed air. Wet sweep only.
Waste disposal methods: It is highly recommended this product be recycled. Otherwise, dispose in accordance with applicable Federal, State, and Local regulations. Do not burn.

7 HANDLING AND STORAGE

Storage temperature: Store away from heat and all ignition sources and open flames in accordance with applicable laws and regulations. Product should not be burned or heated using a direct flame.
Precautions to be taken in handling and storage: Follow recommended work practices and use recommended personal protective clothing and equipment.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	CAS #	OSHA		ACGIH	
		TWA	STEL	TWA	STEL
Asphalt, Oxidized	64742-93-4	NE	NE	0.5 mg/m^3 [a]	NE
Limestone	1317-65-3	15 / 5 [b]	NE	10 / 3 [b]	NE
Fiberglass	65997-17-3	15 / 5 [b]	NE	5 [b]	NE
Urea Formaldehyde Binder	9011-05-6	0.75	2	NE	0.3
Backing Sand	14808-60-7	(10/%SiO_2) +2	NE	0.025	NE

NE = Not Established

[a] = Asphalt Fume as benzene-soluble inhalable aerosol

[b] = Total Nuisance Dust / Respirable Dust

Respiratory protection: Normally not needed in well-ventilated areas unless cutting with power tools. If applicable exposure standards are exceeded or can be exceeded introduce ventilation to remove dust. If increased ventilation is not possible, use a NIOSH approved air-purifying respirator. If concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator/SCBA use, fitting, and training standards and regulations.
Ventilation: Use only with adequate ventilation to maintain exposures below applicable exposure limits.
Eye protection: Safety glasses with side shields must be used when handling.
Skin protection: Must wear leather or cotton gloves during application and tear-off activities.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: Solid material with granular surfacing, sand backing, and very low odor.
Odor threshold: Not Applicable
Vapor pressure: Not Applicable
pH: Not Applicable
Specific gravity/relative density: >2
Vapor density (Air = 1): Not Applicable
Viscosity: Not Applicable; solid
Boiling point: >700°F

Melting point: >200°F
Solubility (IES): No data available
Flash point: >525°F
Evaporation rate (Butyl Acetate = 1) : <0.1
Flammability (Solid and Gas): Not Applicable

Initial boiling point and boiling range: Not Applicable
Auto-ignition temperature: >343°C/680°F
Upper/lower flammability or explosive limits: Not Applicable
Decomposition temperature: Not Applicable

10 STABILITY AND REACTIVITY

Stability: Stable
Reactivity: Reactivity will not occur.
Conditions to avoid: Keep from heat, sparks, open flame and other sources of ignition. Avoid contact with strong oxidizing agents. PRODUCT SHOULD NOT BE BURNED OR HEATED USING A DIRECT FLAME DEVICE.
Hazardous reaction: Polymerization will not occur.
Incompatibility (materials to avoid): Strong acids or bases, oxidizing agents, and selected amines.
Hazardous combustion products: Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons during heating or burning. These combustion products are not expected unless product is heated or burned.

11 TOXICOLOGICAL INFORMATION

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Inhalation: Dust may cause upper respiratory irritation.
Ingestion: May cause harmful effects if swallowed.

THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:

SILICA
Cancer: This product contains crystalline silica (quartz). The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1). IARC concluded there was sufficient evidence in humans and animals for the carcinogenicity of inhaled crystalline silica in the form of quartz from occupational sources. The NTP has classified silica as known to be a human carcinogen. The physical nature of this product may help limit any inhalation hazard from crystalline silica during application and in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate crystalline silica dust.
Acute effects: Exposure to silica dust can cause irritation of the eyes, nose and throat. Exposure to high concentrations can also cause Accelerated Silicosis causing progressive shortness of breath, fever, coughing, and weight loss.
Chronic effects: In addition to cancer, breathing of silica over a period of time can cause damage to the lung tissue and silicosis after long exposure at low concentrations causing shortness of breath, fever, coughing, and weight loss. Prolonged and repeated exposure to respirable silica-containing dust may also cause autoimmune disease, kidney disease, tuberculosis, nonmalignant respiratory disease, and bronchitis.

OXIDIZED ASPHALT

Cancer: This product contains oxidized asphalt. Occupational exposures to oxidized asphalt and its emissions during roofing activities have been classified by the IARC as “probably carcinogenic to humans” (Group 2A). IARC based this classification on its finding that available data from studies in humans points to an association between exposures to oxidized asphalts during roofing and cancers of the lung and upper aerodigestive tract. IARC also determined there was sufficient evidence of carcinogenicity of extracts and condensates of oxidized asphalts in experimental animals. The oxidized asphalt in this product may contain small amounts of Polycyclic Aromatic Hydrocarbons (PAHs) some of which are recognized carcinogens in humans or experimental animals. Oxidized asphalt may also cause irritation of the respiratory tract. The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.

Acute effects: Inhalation of dust may cause nose, throat, respiratory tract, and mucous membrane irritation. Eye contact may cause severe irritation, redness, tearing, and blurred vision. If ingested, may cause mouth, throat and gastrointestinal tract irritation and upset with possible nausea, vomiting and diarrhea. See Section 8 for exposure controls.

Chronic effects: In addition to cancer, prolonged or repeated skin contact may result in dryness and irritation of the skin. Long-term skin exposure to asphalt can increase sensitivity to the sun, and may cause discoloration. Oxidized asphalt may also cause irritation of the upper respiratory tract.

FORMALDEHYDE

Cancer: This product may contain extremely low levels of formaldehyde that are not expected to cause a health hazard under normal conditions of use. IARC and NTP have classified formaldehyde as a human carcinogen based on sufficient evidence that formaldehyde causes nasopharyngeal cancer in humans, limited evidence for cancer of the nasal cavity and paranasal in uses, and “strong but not sufficient evidence” for leukemia. The finding for leukemia reflects the epidemiologists’ finding of strong evidence in human studies coupled with an inability to identify a mechanism for induction of leukemia. The physical nature of this product may help limit any inhalation hazard from formaldehyde during application and in its hardened state.

Acute effects: The major acute toxic effects caused by formaldehyde exposure via inhalation are eye, nose, and throat irritation and effects on the nasal cavity. Other effects seen from exposure to high levels of formaldehyde in humans are coughing, wheezing, chest pains, and bronchitis. Ingestion exposure to formaldehyde in humans has resulted in corrosion of the gastrointestinal tract and inflammation and ulceration of the mouth, esophagus, and stomach.

Chronic Effects: In addition to cancer, exposure to formaldehyde by inhalation in humans has been associated with respiratory symptoms and eye, nose, and throat irritation. Repeated contact with liquid solutions of formaldehyde has resulted in skin irritation and allergic contact dermatitis in humans.

12 ECOLOGICAL INFORMATION

Ecotoxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Other adverse effects (GHG, Ozone): No data available.

13 DISPOSAL CONSIDERATIONS

This product has not been regulated as a hazardous waste by the USEPA. Recycling is recommended. Otherwise, dispose in accordance with Federal, State, and Local regulations. Do not burn. Do not dispose as sewage.

14 TRANSPORT INFORMATION

This product is not regulated as a hazardous material for transport under 49 CFR or for vessel transport under the IMDG Code.
UN number: Not applicable
UN proper shipping name: Not applicable
Packing group, if applicable: Not applicable
Environmental hazards: Not applicable
Transport in bulk: Not applicable
Special precautions: Not applicable

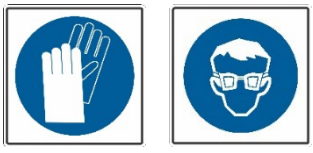
15 REGULATORY INFORMATION

Toxic Substances Control Act (TSCA): Some components in this product are listed on the TSCA Inventory.
Comprehensive Environmental Response Compensation and Liability (CERCLA): None
Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III, Section 302 Extremely Hazardous Substances: None
Section 311/312 Hazard Categories: Immediate Health; Delayed Health; Fire Hazard
Section 313 Reportable Ingredients: This material contains formaldehyde (CAS# 50-00-0), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
California Proposition 65: WARNING: This product can expose you to chemicals, including crystalline silica (quartz), bitumen, titanium dioxide, and formaldehyde, which are known to the State of California to cause cancer. For more information go to: www.P65Warnings.ca.gov.

16 OTHER INFORMATION

HMIS RATING

HEALTH: 1
FLAMMABILITY: 1
REACTIVITY: 0
PERSONAL PROTECTION: B



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