

**TAMKO BUILDING PRODUCTS LLC SAFETY DATA SHEET – T10W2022****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

TRADE NAME: TAMKO TWM-1 Mastic

LABEL: TAMKO

PRODUCT USE &amp; DESCRIPTION: Mastic

CHEMICAL FAMILY: Asphalt Mixture

**MANUFACTURED FOR:**

TAMKO Building Products LLC

P. O. Box 97

Galena, KS 66739-0097

www.TAMKO.com

**EMERGENCY TELEPHONE NUMBERS:**

General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST)

Chemtrec: 1-800-424-9300 (24 HOURS)

**2. HAZARDS IDENTIFICATION**SIGNAL WORD: **Danger**

GHS CLASSIFICATION: Carcinogenicity – Category 1A

Specific Target Organ Toxicity, Single Exposure – Category 3 – respiratory tract irritation

Specific Target Organ Toxicity, Single Exposure – Category 3 – narcotic effects

Specific Target Organ Toxicity, Repeated Exposure – Category 1

Skin Corrosion / Irritation – Category 2

Serious Damage / Eye Irritation – Category 2

Germ Cell Mutagenicity – Category 1B

Flammable Liquid – Category 3

**HAZARD STATEMENTS:**

May cause cancer.

Causes skin and serious eye irritation.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May cause genetic defects.

Flammable liquid and vapor.

Additional hazard information: Can cause silicosis and other permanent lung damage.

**PRECAUTIONARY STATEMENTS:**Prevention

Obtain special instructions before use.

Do not breathe dust/fume/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash hands and exposed skin thoroughly after handling.

Ground/bond container and receiving equipment.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep containers tightly closed.

Use only non-sparking tools. Take precautionary measures against static discharge.

Use explosion-proof electrical/ventilating/lighting equipment.

Response

If on skin: Wash with plenty of water.

Get medical advice/attention: If exposed or concerned or you feel unwell, if eye and or skin irritation persists.

Specific treatment: See section 4-First Aid

In case of fire: See Section 5.

Take off contaminated clothing and wash before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage

Store locked up, in a well-ventilated place. Keep cool.

Disposal

Dispose in accordance with Federal, State, and Local regulations. (See section 13 for additional information).

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	CAS No.	% by Weight
Asphalt	8052-42-4	40-60
Naphtha (petroleum), hydrotreated heavy	64742-48-9	5-20
Attapulgite clay, hydrous magnesium aluminum silicate	12174-11-7	1-20
Solvent naphtha (petroleum), light aromatic	64742-95-6	1-20
1,2,4-trimethylbenzene	95-63-6	1-10
1-propanamine, 3-(isodecyloxy)-, acetate	28701-67-9	1-10
Benzene	71-43-2	<1
Benzene, dimethyl	1330-20-7	<1
Benzene, 1-methylethyl-	98-82-8	<1
Quartz*	14808-60-7	<1
*Contains Crystalline Silica Quartz	14808-60-7	0.1-1
Other components below reportable levels		12.24

**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. Remove contact lenses, if present and easy to do. Rinse with water. Get medical attention if irritation develops and 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. Take off immediately all contaminated clothing. Wash clothing separately before reuse. 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. Call a physician or get medical attention if symptoms develop or persist.

**NOTES TO PHYSICIAN:** Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

**5. FIRE FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Alcohol resistant foam. Dry powder. Carbon dioxide (CO<sub>2</sub>). Avoid use of straight-stream water.

**UNSUITABLE EXTINGUISHING MEDIA:** Do not use water jet as an extinguisher, as this will spread the fire.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** During fire, gases hazardous to health may be formed.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**FIRE FIGHTING EQUIPMENT / INSTRUCTIONS:** Move containers from fire area if you can do so without risk.

**SPECIFIC METHODS:** Use standard firefighting procedures and consider the hazards of other involved materials.

**GENERAL FIRE HAZARDS:** Flammable liquid and vapor.

**6. ACCIDENTAL RELEASE MEASURES****PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED**

Flammable. Handling equipment must be grounded to prevent sparking. Remove ignition sources, ventilate area, and avoid inhalation, eye or skin contact by using appropriate precautions outlined in Section 8 of this SDS. Stop leak and contain spilled material with absorbent material. Collect adsorbed product and clean up materials in appropriate container for proper disposal. Move containers from spill area. For larger spills, keep unnecessary people away. Stay upwind of and away from spill. Notify proper authorities. Prevent materials from entering drains, sewers, or waterways. Spills entering surface waters or sewers entering/leading to surface waters that cause a sheen must be reported to the National Response Center 1-800-424-8802.

**WASTE DISPOSAL METHODS:** This product could be classified as a hazardous waste due to ignitability. Dispose in accordance with applicable Federal, State, and Local regulations. Do not burn.

**7. HANDLING AND STORAGE**

**PRECAUTIONS FOR SAFE HANDLING:** Avoid prolonged exposure. Observe good industrial hygiene practices.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Store locked up. Store in a cool dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (See Section 10 of the SDS). Keep away from heat and sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****EXPOSURE LIMITS**

Components	CAS No	OSHA		ACGIH		Unit
		TWA	STEL	TWA	STEL	
Asphalt	8052-42-4	NE	NE	0.5*	NE	mg/m <sup>3</sup>
Benzene	71-43-2	1**	5**	0.5	2.5	ppm
Benzene, dimethyl	1330-20-7	100	NE	100	150	ppm
Benzene, 1-methylethyl	98-82-8	50	NE	50	NE	ppm
1,2,4-Trimethylbenzene	95-63-6	NE	NE	25	NE	ppm
Quartz (crystalline silica)	14808-60-7	0.05	NE	0.025	NE	mg/m <sup>3</sup>

NE= Not established.

Note: Due to the form of the product, hazardous exposures from this product are not expected to occur. Gloves must be worn when handling and adequate ventilation must be provided during roofing related activities.

\*Asphalt Fume as benzene-soluble inhalable aerosol (Bitumen); TWA for inhalable fraction.

\*\*Benzene Standard 29 CFR 1910.1028.

**RESPIRATORY PROTECTION:** Normally not needed in well-ventilated areas. If applicable exposure standards are exceeded or can be exceeded, 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, training standards, and regulations.

**VENTILATION:** Use only with adequate ventilation to maintain exposures below applicable exposure limits. Local exhaust ventilation and/or enclosure of the process may be required. All equipment must be explosion proof.

**EYE PROTECTION:** Safety glasses with side-shields (or goggles) or face shield.

**SKIN:** Chemical resistant gloves, apron, or other protective clothing needed to prevent skin contact. Remove and clean contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance and Odor:</b>	Brown to black, viscous liquid with mild petroleum odor solvent.	<b>Upper/Lower Flammability or Explosive Limits:</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Vapor Pressure:</b>	Not available
<b>pH:</b>	Not available	<b>Vapor Density (Air = 1):</b>	Not available
<b>Boiling Point:</b>	Not available	<b>Relative Density:</b>	Not available
<b>Melting Point:</b>	Not available	<b>Solubility (IES):</b>	Not available
<b>Flash Point:</b>	100 - 140 °F COC	<b>Initial Boiling Point and Boiling Range:</b>	Not available
<b>Autoignition Temperature:</b>	473 °F estimated	<b>Evaporation Rate (Butyl Acetate = 1):</b>	Not available
<b>Viscosity:</b>	Not available	<b>Flammability (Solid and Gas):</b>	Not applicable
<b>Decomposition Temperature:</b>	Not available	<b>Partition Coefficient: N-Octanol/Water:</b>	Not available
<b>VOC:</b>	<250 g/l estimated	<b>Specific Gravity:</b>	1.03

**10. STABILITY AND REACTIVITY**

**STABILITY:** Material is stable under normal conditions.

**REACTIVITY:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**CONDITIONS TO AVOID:** Keep away from heat, hot surfaces, sparks, open flame and other ignition sources. Avoid temperatures exceeding the flash point. Avoid contact with incompatible materials. Prevent vapor accumulation. **THIS PRODUCT SHOULD NOT BE HEATED OR BURNED USING A DIRECT FLAME DEVICE.**

**HAZARDOUS REACTION:** Hazardous polymerization will not occur.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** No hazardous decomposition products are known.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons.

**11. TOXICOLOGICAL INFORMATION**

See information in Section 2. Likely routes of exposure:

**EYE CONTACT** – Causes serious eye damage.

**SKIN CONTACT** – Causes skin irritation.

**INHALATION** – Prolonged inhalation may be harmful. May cause irritation to the respiratory system. May cause drowsiness and dizziness. Cured product particles, fume and vapor may cause upper respiratory irritation.

**INGESTION** – May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:** Direct contact with eyes may cause temporary irritation.

**INFORMATION ON TOXICOLOGICAL EFFECTS****Acute Toxicity**

Components	CAS Number	Exposure	Species	Test Results
1,2,4-Trimethylbenzene	95-63-6	Dermal – LD50	Rabbit	>3160 mg/kg
1,2,4-Trimethylbenzene	95-63-6	Oral – LD50	Rat	6 g/kg
Benzene, dimethyl	1330-20-7	Dermal – LD50	Rabbit	>43 g/kg
Benzene, dimethyl	1330-20-7	Inhalation – LC50	Rat	6350 mg/l; 4 hours
Benzene, 1-methylethyl	98-82-8	Inhalation – LC50	Mouse	24.7 mg/l; 2 hours

**Skin corrosion/irritation:** Irritating to skin.

**Serious eye damage/eye irritation:** Causes serious eye irritation.

**Respiratory or skin sensitization:**

**Respiratory sensitization:** Not a respiratory sensitizer.

**Skin sensitization:** May cause sensitization by skin contact.

**Germ cell mutagenicity:** May cause genetic defects.

**Carcinogenicity:** May cause cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Chemical Name	CAS Number	Category
Asphalt	8052-42-4	2B – Possibly carcinogenic to humans
Attapulgitic clay, hydrous magnesium aluminum silicate	12174-11-7	3 – Not classifiable as to carcinogenicity to humans
Benzene	71-43-2	1 – Carcinogenic to humans
Benzene, dimethyl	1330-20-7	3 – Not classifiable as to carcinogenicity to humans
Benzene, 1-methylethyl	98-82-8	2B – Possibly carcinogenic to humans
Quartz (crystalline silica)	14808-60-7	1 – Carcinogenic to humans

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Chemical Name	CAS Number	Category
Benzene	71-43-2	Cancer
Quartz (crystalline silica)	14808-60-7	Cancer

**US. National Toxicology Program (NTP) Report on Carcinogens**

Chemical Name	CAS Number	Category
Benzene	71-43-2	Known to be human carcinogen
Benzene, 1-methylethyl	98-82-8	Reasonably anticipated to be a human carcinogen
Quartz (crystalline silica)	14808-60-7	Known to be human carcinogen

**Reproductive toxicity:** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure:** Central nervous system. May cause drowsiness and dizziness. May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure:** Not classified.

**Aspiration hazard:** Not an aspiration hazard.

**Chronic effects:** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is expected.

Product	CAS Number	Aquatic Exposure	Species	Test Results
TWM-1 Mastic (trial)	NA	Crustacea – EC50	Daphnia	4289.7461 mg/l, 48 hours estimated
TWM-1 Mastic (trial)	NA	Fish – LC50	Fish	262.6234 mg/l, 96 hours estimated

Components	CAS Number	Exposure	Species	Test Results
1,2,4-Trimethylbenzene	95-63-6	Fish – LC50	Fathead minnow (Pimephales promelas)	7.19 – 8.28 mg/l, 96 hours
Benzene	71-43-2	Crustacea – EC50	Water flea (Daphnia magna)	8.76 – 15.6 mg/l, 48 hours
Benzene	71-43-2	Fish – LC50	Rainbow trout, Donaldson trout (Oncorhynchus mykiss)	7.2 – 11.7 mg/l, 96 hours
Benzene, dimethyl	1330-20-7	Fish – LC50	Bluegill (Lepomis macrochirus)	7.711 – 9.591 mg/l, 96 hours
Benzene, 1-methylethyl	98-82-8	Crustacea – EC50	Brine shrimp (Artemia sp.)	3.55 – 11.29 mg/l, 48 hours
Benzene, 1-methylethyl	98-82-8	Fish – LC50	Rainbow trout, Donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours

**Persistence and degradability:** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential:**

Partition coefficient n-octanol / water (log Kow)

Benzene: 2.13

Benzene, dimethyl: 3.12 – 3.2

Benzene, 1-methylethyl: 3.66

**Mobility in soil:** No data availability

**Other adverse effects:** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

**13. DISPOSAL CONSIDERATIONS**

Dispose in accordance with Federal, State, and Local regulations. Prevent materials from entering drains, sewers, or waterways. Do not dump on the ground. Do not burn.

**14. TRANSPORT INFORMATION:****DOT**

**UN number:** UN1999

**UN proper shipping name:** Tars, liquid including road oils and cut back bitumens

**Transport hazard class(es):**

**Class:** Combustible Liquid

**Label(s):** 3

**Packing group:** III

**IMDG**

**UN number:** UN1999

**UN proper shipping name:** TARS, LIQUID including road oils, and cutback bitumens

**Transport hazard class(es):** **Class:** 3

**Packing group:** III

**Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC Code:** Not established.

Further information:

If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous material [This exception to 49 CFR cited at 173.150(f)].

If shipped by vessel in individual containers that are less than 7.9 gallons (30 L) each, then IMDG 2.3.2.5 exception applies: Not regulated as a hazardous material.


**15. REGULATORY INFORMATION**

**TSCA:** Some components in this product are listed on the TSCA Inventory.

**CERCLA / SARA:**

**Section 302 / Section 304 / Section 313:** Product composition is listed in Section 3 of the SDS

**Section 311 / Section 312:** See Section 2 of the SDS

**California Proposition 65:**  **WARNING:** Cancer and Reproductive Harm – <https://www.P65Warnings.ca.gov>.

**16. OTHER INFORMATION**

HMIS Rating:	NFPA Rating:
Health - * 2	Health - 2
Flammability - 2	Flammability - 2
Reactivity - 0	Reactivity - 0

SDS Date of Preparation / Revision: February 2022

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