



Pak Arab Trading & Shipping Agencies PVT Ltd.

MATERIAL SAFETY DATA

PRODUCT NAME: THERMASHIELD

WATER BASED ACRYLIC ELASTOMERIC ROOF COATING

SECTION I - MANUFACTURING IDENTIFICATION

MANUFACTURING'S NAME: PATSA

PHONE:+92 (21) 32201072

ADDRESS: Steel House, West Wharf Rd. Karachi

NAME OF PREPARER: PATSA

DATE OF PREPARATION: 2010

D.O.T. CLASSIFICATION: NOT APPLICABLE CLASS: N/A UN:N/A PACKING

GROUP:N/A

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

<u>HAZARDOUS COMPONENTS</u>	CAS#	OCCUPATION EXPOSURE LIMITS			VAPOR PRESSURE		Weight Percent <10
		SHA	TWA	CGIHTWA	OSHA	STEL	
Quartz	14808-60-7	0.25 mg/m3	0.1 mg/m3	None			
Titanium Dioxide (d)	13463-67-7	10mg/m3	10mg/m3	None	N/A	N/A	5 - 15
Calcium Carbonate (d)	1317-65-3	10mg/m3	10mg/m3	None	N/A	N/A	25-35

(d) Hazardous as dust when product is sanded

CARCINOGENICITY: NO **IARC MONOGRAPHS?** NO **OSHA REGULATED?** NO

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

the liver

the urinary system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None generally recognized.

CANCER INFORMATION: For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention. **SKIN:** Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet. **INGESTION:** Do not induce vomiting. Get medical attention immediately.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A

METHOD USED: N/A

FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: N/A

UPPER: N/A

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES Keep people away. Do not enter confined fire space without proper protective equipment including a NIOSH approved self-contained breathing apparatus. Cool closed containers with water.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS "Closed containers may explode when exposed to extreme heat. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention."

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 - HANDLING AND STORAGE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

"Keep unnecessary people away. Ventilate enclosed spaces and avoid breathing vapors. Wear protective equipment observing precautions on this sheet. Dike, contain and soak up spill with inert material (such as clay, sand, etc.)."

WASTE DISPOSAL METHOD:

Place in non-leaking containers, seal tightly and label properly for disposal. A health hazard may still exist since absorbent materials will only absorb liquid; they will not absorb vapors. Observe all federal, state and local regulations concerning disposal of hazardous waste.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep containers closed when not in use. Store and use only in well ventilated areas. Avoid breathing vapors or spray mist. Avoid eye or skin contact. Wash thoroughly after handling. Never transfer material to an unlabeled container.

OTHER PRECAUTIONS:

Read and observe precautions on product label and this sheet. Keep out of reach of children. Empty containers may be hazardous from residues of product and vapor and all caution of this sheet apply to them.

SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Vapors or mists can cause drowsiness, cough, bronchitis, blurred vision, and irritation of mucous, nausea, headache, dizziness, weakness and loss of coordination.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: May cause irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: May cause irritation.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

"May cause headache, gastrointestinal irritation, nausea, vomiting and diarrhea."



HEALTH HAZARDS (ACUTE AND CHRONIC) INCLUDING TARGET ORGANS:

This product may contain some material, which at a normal low level should not present a problem.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Any respiratory or skin condition may be aggravated.

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation: Remove to fresh air. Eyes: Flush immediately with water. Consult physician if irritation persists. Skin: Remove with soap and water. Remove contaminated clothing. Ingestion: Drink 1 to 2 glasses of water to dilute. DO NOT induce vomiting because aspiration of material into the lungs can cause chemical pneumonitis, which can be fatal. Consult physician or poison control center immediately. Treat symptomatically.

SECTION 9 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: 212-250⁰ F **POUNDS PER GALLON** 11.50 **SPECIFIC GRAVITY (H2O=1)** 1.4
VAPOR DENSITY: LIGHTER THAN AIR **EVAPORATION RATE:** SLOWER THAN ETHER
SOLUBILITY IN WATER: YES **APPEARANCE AND ODOR:** N/A
VOLATILE ORGANIC COMPOUND – Not exceeding 150 g/l

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIAL TO AVOID): None

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: None

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer. IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water. There is no evidence to indicate it causes birth defects in humans.

TOXICOLOGY DATA

<u>CAS No.</u>	<u>Ingredient Name</u>			
14808-60-7	Quartz	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14464-46-1	Cristobalite	LC50 RAT	4HR	Not Available
				LD50 RAT Not Available
13463-67-7	Titanium Dioxide	LC50 RAT	4HR	Not Available
				LD50 RAT Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.



SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT): Not Regulated for Transportation.

Canada (TDG): Not Regulated for Transportation.

IMO: Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

DISCLAIMER

The information contained in this Material Safety Data Sheet is based on the data available to us and is believed to be correct. However, we assume no responsibility for any inaccuracies that may subsequently be proven. Purchaser assumes all risk in his use of the material even when recommended safety procedures are followed.

N/A = Not Applicable