PRODUCT DATA SHEET

WALL AND CEILING CLADDING

STORMBRITE

ABOUT STORMBRITE

STORMBRITE is a lightweight, versatile, flexible and durable foamed PVC sheet with a Class 1 Fire rating.

Easily fabricated and maintenance free, ideal for use in construction and cladding. A laminated, high gloss finish to one side is excellent for producing high quality displays for printers and advertisers. Complies with international standards.

IDENTIFICATION TO THE ARTICLE

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Trade Names	STORMBRITE84 / STORMBRITE104
Product Name	Foamed Rigid Polyvinyl Chloride sheets
Product Name	Polyvinyl Chloride Homopolymer
CAS Number	9002 - 86 - 2
UN Number	None
ACX Number	X1007407-8
RTECS	KV0350000
Material Synonyms	PVC
NFPA Ratings	Health = 1, Fire = 0, Reactivity = 0

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES	LABEL
Appearance	Flat foamed plastic sheets
Physical State	Solid
Colour	White or coloured
Odour	None

STORMBRITE

PHYSICAL AND CHEMICAL PROPERTIES CONTINUED

PHYSICAL AND CHEMICAL PROPERTIES	LABEL
Density	0.4 - 1.0 gr/cm^3
Heat Deflection	62 - 65°C
Boiling Point, 760 Hg	Not relevant
Viscosity	Not relevant
Solubility in Water	<0.1g/100mL at 23°C
pH Value	Not relevant
Flash Point	391°C ASTM D 1929
Autoignition Temp.	454°C ASTM D 1921
Flammability Limit	None
Explosion Limit	None
Evaporation Rate	Not relevant
Percent Volatiles	Not relevant

COMPOSITION/INFORMATION OF INGREDIENTS

Tin stabilized PVC sheets, 2.5% by weight tin-mercaptide based stabilizer. Pigments and additives used to enhance specific properties are encapsulated in the polymer resin matrix. No solvents. No plasticizers. No cadmium, lead, or other heavy metals used.

HAZARD IDENTIFICATION

No particular hazards known.

INHALATION

Route of entry – inhalation: No.
If exposed to combustion fumes in high concentration, bring victim to fresh air. Medical attention needed.

SKIN CONTACT

Burns resulting from accidental contact with molten material must be flushed immediately with cold water. Do not remove the polymer from the skin. Medical attention needed.

SKIN ABSORPTION

Route of entry – skin: No

EYE CONTACT

Like any foreign body, can cause mechanical irritation. Consult physician.

STORMBRITE

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Water spray or CO_2. CO_2 is less recommended due to lack of cooling capacity.

SPECIAL FIRE FIGHTING PROCEDURES

Personnel without suitable respiratory apparatus should leave the affected area to prevent exposure to toxic or combustible gases.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS

Positive-pressure self-contained breathing apparatus, protective clothing, and gas mask approved for acid vapours.

UNUSUAL FIRE AND EXPLOSION HAZARDS

PVC is a self-extinguishing fire retardant material that, being exposed to open fire and high temperatures, decomposes, emitting large quantities of HCl, which tends to extinguish the flames. It does not continue to burn after ignition without an external fire source. HCL has a strong acidic odour that causes sensory alert at very low concentrations. HCl odour threshold = 0.77 ppm. Exposure to high concentrations may cause burns to mucous membranes. OSHA legal airborne PEL is 5 ppm, which should not be exceeded at any time. Soot emitted when PVC is forced to burn may obscure visibility.

HANDLING AND STORAGE

GENERAL HANDLING PRECAUTIONS

Avoid mechanical contact with eyes.

VENTILATIONS

General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled.

OTHER PRECAUTIONS

No exposure hazard. In the event of fire, could and overlap product with water. Static electricity discharge sparks possible during handling. Avoid entering vicinity of flammable materials.

STORAGE

Store in a cool, shady area. No special technical protective measures required.

INSTALLATION

Advised to be installed using the STORMGRIP A1596 Adhesive. Further details regarding this are shown on the STORMGRIP Data Sheet.

EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

No occupational exposure limits established by OSHA, ACGIH or NIOSH.

PERSONAL PROTECTION

No special protection is needed for the following:
- Respiratory protection
- Hand/glove protection
- Eye protection

STABILITY AND REACTIVITY

STABILITY

Stable.

CONDITIONS TO AVOID

Excessive heat, or open flame. Temperatures above 150°C will demonstrate raw polymer resin and liberate HCl.

INCOMPATIBLE MATERIALS

Oxidizing agents or strong mineral acids can cause reaction.

THERMAL DECOMPOSITION

Begins above 150°C, caused by fire/overheating during improper processing. Fumes damaging to health may be released.

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HAZARDOUS DECOMPOSITION PRODUCTS

Burning can produce the following combustion products:

COMBUSTION PRODUCT	CONSEQUENCE
Carbon monoxide (CO)	Is highly toxic if inhaled; present in combustion fumes of all organic materials;
Carbon dioxide (CO_2)	In sufficient concentrations, can act as an asphyxiate; present in combustion fumes of all organic materials;
Hydrogen chloride (HCl)	In high concentrations, can cause irritation of the respiratory passages; at very high concentrations, may cause burns to mucous membranes.

TOXICOLOGICAL INFORMATION

PVC materials have a very low acute toxicity. In rats, an acute LD_{50} > 10 gr/kg of body weight. PNEUMOCONIOSIS has been described from inhalation of combustion products (effects of overexposure). Industrial hygiene studies have shown that under normal and expected conditions of use of PVC materials, exposures are well below applicable limits.

ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY

Detailed studies have not been conducted concerning the environmental fate of the product. According to present knowledge, no unfavourable ecological effects are to be expected. Not generally hazardous to water. Insoluble in water, non-toxic solid.

Mobility: No information currently available
Persistence and biodegradable ability: Biodegradation period – tens of years
Bioaccumulative potential: No information currently available

ENVIRONMENTAL RISKS

No hazard expectation to terrestrial or aquatic flora and fauna. See table below for toxicity details.

OTHER INFORMATION

All available ecological data has been taken into account for the development of the hazard and precautionary information contained in this safety area.

DISPOSAL CONSIDERATIONS

The product is not considered hazardous under current EPA hazardous waste regulations. Recycling is the preferred method of disposal. Alternatively, the product may be disposed of in an approved landfill. High temperature incineration under controlled conditions due to formation of HCl. All wastes should be evaluated in conjunction with applicable solid and hazardous waste regulations, Toxicity Characteristic Leaching Procedures (TCLP) and disposed of as appropriate. This product does not contain any cadmium or other heavy metal pigments or stabilizers. It is the user's responsibility to dispose of all waste in accordance with all national and local regulations at properly permitted or authorized facilities.

REGULATORY INFORMATION

With regards to dust formed as a consequence of mechanical treatments, the appropriate regulations value limits for fine dust must be observed: MAC value (fine dust) – 5 mg/m3. OSHA Hazard Communication Classification for dusts and combustion fumes: Irritant, Skin Hazard and Lung Hazard. SARA Title III Classification for dusts and combustion fumes: Acute Health Hazard; Chronic Health Hazard WHMIS Classification: Non-hazardous.

TOXICITY	ENVIRONMENTAL RISKS
Ecotoxicity	LD_{50} (rats) > 10 gr/kg LC_{50} (bacterial inhibition) – no data available
Aquatic toxicity	LC_{50} (daphnia magna) – no data available LC_{50} (fathead minnow – fish) - no data available