

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** **Greenlam Laminates**  
All Brands, Variants, Grades, Textures, Sizes, & Thicknesses

**Trade Names:** **Greenlam, New Mika, Clads, Lab Guardian, New Mika Fx, Sturdo, Stratus**  
(all products technically called as HIGH PRESSURE DECORATIVE LAMINATES)

**Manufacturer:** **Greenlam Industries Ltd.,**  
2nd Floor, West Wing, World Mark 1, Aerocity,  
IGI Airport Hospitality District, New Delhi-110037  
Telephone: 011-42791300

**Web site:** [www.greenlam.com](http://www.greenlam.com)

**Product uses:** **Decorative surfacing materials for various furniture, doors, cubicles, lockers, exterior cladding, paneling and allied applications.**

**In case of emergency contact:**

USA-130-545-80079

International- +91 9717595676 or +91-011-42791399 (Ext. 485)

## Section 2: EMERGENCY OVERVIEW & HAZARD IDENTIFICATION

No known hazards for material as supplied.

**Appearance/Odor:** Thin to thick, rigid laminate sheets, various sizes, finishes thicknesses and colors. No significant odor.

**For products in sheets or boards form:**

**NFPA Labeling:** Health-0, Fire -1, Reactivity-0,  
(0= minimal hazard, 1 =slight hazard, 2=moderate hazard, 3= severe hazard,  
4= extreme hazard)

**HMIS:** Health-0, Flammability-1, Reactivity-0, PPE-B

**GHS Classification:** Not applicable. Material is classified as non-hazardous

**GHS Signal Words with Hazard and Precautionary Statements:** No Applicable

**GHS Pictograms:** Not Applicable

**Route of Entry:** None for the product as sold

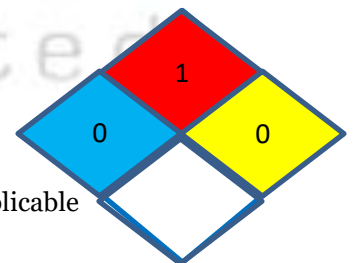
**Target Organs:** None

**Skin Contact:** Solid Sheet may cut skin or cause abrasions if they are not handled properly

**Eye Contact:** No Hazard for product as sold

**Respiratory Contact:** No Hazard for product as sold

**Ingestion:** Not likely to occur and not expected to cause a significant toxic response.



**Potential Health effects:** Sanding, sawing, drilling, routing, etc. of this material during fabrication may generate airborne nuisance dust, fines, chips etc. This dust may cause eye, nose, skin, and upper respiratory tract irritation. Use of appropriate personal protection and/or engineering controls (such as local exhaust ventilation) should be employed whenever sanding, sawing, drilling, routing, etc. of this material. Refer Section 4 for first aid measures.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain regulated levels of NTP, IARC, or OSHA listed carcinogens

Component	CAS Number	% by Weight
Paper/Fiber	NA	40-70
Resins (PF & MF)	9003-35-4 & 9003-08-01	30-50
Biocides (EPA Approved)	NA	<0.1%

### Section 4: FIRST AID AND MEASURES

**Eye Contact:** No hazard for product as sold. However, the product can have sharp corners and edges. During cutting, sawing, fabrication or routing or any such operations dust or fines may get generated. Use of eye protection recommended during handling and these operations. If dust gets into the eyes, immediately rinse affected eye for at least 15 minutes with clean water. Do not rub with your fingers or palm, it can aggravate eye injury. If irritation persists, seek medical attention.

**Skin Contact:** No hazard for product as sold when handled properly. However, they may cause cuts or abrasions if not handled properly. Use of suitable cut protection hand gloves is recommended. During cutting, sawing, fabrication or routing or any such operations fines or dust may get generated. If excess dust gets onto the skin, remove contaminated clothing and wash before reuse. Wash skin with soap and water. Seek medical attention if irritation persists.

**Ingestion:** Not likely to occur. During cutting, sawing, fabrication or routing or any such operations fines or dust may get generated. If dust gets into mouth, rinse with clean water. Seek medical attention if necessary.

**Inhalation:** No hazard for product is sold. During cutting, sawing, fabrication or routing or any such operations fines or dust may get generated. Use of dust protection PPE recommended during these operations. If excess dust is inhaled, move to fresh air. Seek medical attention if symptoms such as wheezing and/or shortness of breath occur.

**Others** - In case the products in form of heavy boards are required to be handled manually, insist on wearing protective toe safety shoes.

### Section 5: FIRE FIGHTING MEASURES

**Flash Point:** Not applicable

**Flammability Classification:** Class Cs1d0 minimum as per EN 13501 (Products is capable of resisting a small flame attack - for a longer period - without substantial flame spread. In addition, they are also capable of undergoing thermal attack by a single burning item with sufficiently delayed and limited heat release. Very limited amount of smoke developed and no burning droplets or particles)

Some variants may exceed the above performance.

**Explosion risk due to Mechanical Impact:** Not applicable

**Explosion risk due to Static Discharge:** Not applicable for product as sold. Safety precautions and proper ventilation as recommended by NFPA-68 for Class ST-1 dusts should be followed for dust/chips arising during operations like fabrication, milling, sawing etc., from presenting an explosion hazard.

**Suitable Extinguishing Media:** CO<sub>2</sub>, water, foam or dry chemical powder

**Possible Products of Combustion:** Various oxides of carbon and nitrogen.

**Firefighters:** Firefighters should wear self-contained breathing apparatus and full fire-fighting turnout gear.

## Section 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions & Emergency procedures:** Material is non-hazardous as sold. It is provided in the form of solid sheets or boards. Hence, spillage is not applicable.

**Environmental precautions:** None

**Methods for Clean-up:** Recover undamaged materials for reuse or reclamation. Sweep or pick up scrap material and dust and place in disposal containers.

## Section 7: HANDLING AND STORAGE

**Handling:** Institute necessary housekeeping measures to keep the product free from dust. Minimize dust generation and accumulation and prevent dust from entering eyes. Do not breathe dust. Avoid prolong skin contact with dust and/or filings. Cut, drill, saw, sand and finish, etc. in well-ventilated areas. Never allow dispersion of dust into air.

**Storage:** Store in dry, well-ventilated area and keep away from strong chemicals, solvents and excessive heat. Prolonged or extreme heat can cause damage to the surface.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

Exposure Guidelines	OSHA PEL	Exposure Guidelines	Material
Total Dust	15 mg/ m <sup>3</sup>	Inhalable	Dust arising from cutting, drilling, milling etc. of the product
Respirable Dust	5 mg/ m <sup>3</sup>	Respirable	

**Engineering Controls:**

Provide adequate ventilation to maintain exposure levels below applicable limits wherever fabrication works generate dust or fines.

Effective dust control and collection system must be provided. Spilled dust should preferably be collected using vacuum cleaning. Accumulation of dust on floor and structures should be prevented.

The system must be designed to effectively remove the dust generated and ensures prevention of dust escaping to work areas.

HPL dust is combustible. Hence, spark detection and extinguishing system must be provided in the dust collector ducting.

Measures to prevent and mitigate dust explosion such as dust-tight fittings for electrical connections and explosion vents should also be provided in the dust collection system.

**Eye/face Protection:** Wear safety glasses when sawing, sanding, drilling or routing.

**Skin Protection:** Wear appropriate gloves when installing, transporting, sawing, cutting, drilling, routing or handling during different fabrication stages.

**Foot Protection:** No special protection required unless heavy boards are handled. Wear safety shoes in such cases.

**Respiratory Protection:** Where airborne concentrations of dust are expected to exceed the allowable exposures approved respirator should be worn, chosen based on the form and concentration of the contaminant. Respirator usage must be in accordance with the OSHA Respiratory Protection Standard, 29 CFR 1910.134 or prevalent local regulation.

**General Hygiene:** Wash thoroughly after sawing, cutting, drilling, or routing. Have eyewash facilities at different points of work

**Section 9:  
PHYSICAL AND CHEMICAL PROPERTIES**

<p><b>Odor:</b> None</p> <p><b>Odor Threshold:</b> Not applicable</p> <p><b>Physical State:</b> Solid sheet or board</p> <p><b>pH:</b> Not applicable</p> <p><b>Freezing Point:</b> Not applicable</p> <p><b>Boiling Point:</b> Not applicable</p> <p><b>Flash Point:</b> Not applicable</p> <p><b>Evaporation Rate:</b> Not applicable</p> <p><b>Upper Flammability Limit:</b> Not applicable</p> <p><b>Decomposition Temperature:</b> Not available</p>	<p><b>Lower Flammability Limit:</b> Not applicable</p> <p><b>Vapor Pressure:</b> Not applicable</p> <p><b>Vapor Density:</b> Not applicable</p> <p><b>Specific Gravity:</b> 1.40</p> <p><b>Solubility (water):</b> Insoluble</p> <p><b>Auto-ignition Temperature:</b> Not applicable</p> <p><b>VOC release:</b> Less than 0.22 ppm</p> <p><b>Formaldehyde release:</b> Less than 0.0073 ppm</p> <p><b>Total Aldehyde release:</b> Less than 0.043 ppm</p> <p><b>Lower Explosion Limits:</b> Not applicable</p> <p><b>Upper Explosion Limit:</b> Not applicable</p>
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## Section 10: STABILITY AND REACTIVITY

**Reactivity:** Non-reactive

**Conditions to Avoid:** Avoid exposing to oxidizers, strong chemicals, alkaline solutions and solvents which will damage the surface appearance of the material. If spills occur, remove immediately from the material.

**Incompatible Materials:** No known incompatible material which may violently react.

**Hazardous Decomposition Products:** Thermal decomposition product may include various oxides of carbon and Nitrogen

**Hazardous Polymerization:** No hazardous polymerization or reactions occur.

## Section 11 (a): TOXICOLOGICAL DATA-ACUTE EFFECTS

**Acute Toxicity to Humans or Animals:** Not expected to be toxic

**Oral LD<sub>50</sub>:** Not known

**Dermal LD<sub>50</sub>:** Not known.

**Inhalation:** See Section 2. Toxicity data not available

**Eye Irritation:** See Section 2. Toxicity data not available

**Skin irritation:** See Section 2. Toxicity data not available

**Sensitization:** No data for product

**STOT, SE:** No data for the product

## Section 11 (b): TOXICOLOGICAL DATA- CHRONIC EFFECTS

**Chronic Toxicity to Humans or Animals:** Not expected to be toxic

### **Carcinogenicity:**

This product may contain trace amounts of formaldehyde which is listed by IARC as carcinogenic. The ACGIH lists formaldehyde as a suspect human carcinogen. NTP: formaldehyde as carcinogenic. The Product has been proved to meet Greenguard Gold Certification Norms

**Total Formaldehyde** less than 0.0073 ppm (OSHA PEL = 0.7 ppm and STEL = 2 ppm)

HPL dust can cause irritation and skin allergy in some persons. Hence, dust control measures and suitable respiratory protection must be used.

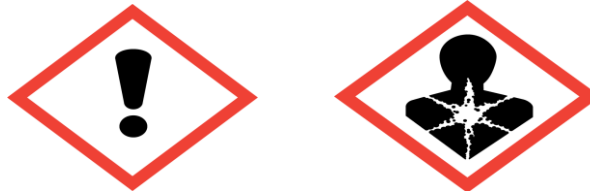
**STOT, RE:** No data for the product

**Mutagenicity:**

**Reproductive Effects:** No data for product.

**Developmental Effects:** No data for product

**GHS Symbols:**



## Section 12: ECOLOGICAL INFORMATION

**Eco-toxicity:** No data for product

**Persistence/Degradability:** No data for product

**Bio-accumulation / Accumulation:** No data for product

**Mobility in Environment:** No data for product

## Section 13: DISPOSAL CONSIDERATIONS

**Disposal:**

**HPL** - Material is non-hazardous and no special treatment is required for disposal. Disposal in landfill, co-processing in cement kiln or by other process must be in accordance with Federal, State and Local regulations.

**Cutting & Sanding Dust** - Material is non-hazardous and no special treatment is required for disposal. Disposal in landfill, co-processing in cement kiln or by other process must be in accordance with Federal, State and Local regulations.

## Section 14: TRANSPORTATION INFORMATION

**DOT Classification:** Not Regulated  
**Transport Hazard Class:** Not applicable  
**Packing group:** Not applicable  
**ADR Classification:** Not applicable  
**RID Classification:** Not applicable  
**UN Number/Shipping name:** Not available



## Section 15: REGULATORY INFORMATION

### US Federal Regulations:

**CAS Number:** None

**SARA 302 (EHS) Threshold Planning Quantity:** None

**SARA 304 Released Quantity of Extremely Hazardous substance:** None

**CERCLA or Superfund classification:** None

**RCRA Hazard Code:** None

### State Regulations:

Substance contained in this product known to the State of California (CA proposition 65) to cause cancer or other harm -Formaldehyde (CAS 50-00-0) in traces.

### International Regulations:

**EINECS:** None

**WHMIS (Canada):** Product not classified as hazardous



**Greenlam**  
Industries Limited

## Annexure 1: RISK ASSESSMENT

S. No.	Activity	Hazard	Risk Consequence	Risk Level	Recommended Controls		
1	Handling and Storage of HPL Sheets & Compact Boards	Formaldehyde Fumes inhalation	Illness and Cancer in most severe case	Low	Adequate Ventilation to prevent accumulation of formaldehyde fumes		
2	Handling of HPL	Cutting Hazard	Cut Injury	Medium	Cut Resistance Gloves		
3	Handling of HPL Compact boards	Impact Hazard	Finger/Toes Injury	Medium	Impact Resistant Gloves & Steel Toe Boots		
4	Machining, Cutting and Sanding of HPL	HPL Dust	Respiratory Disease	Medium	<b>i.</b> Respiratory Protection Mask <b>ii.</b> Dust Control and Collection System <b>iii.</b> Adequate ventilation in workplace		
5			Skin Allergy/ Irritation	Medium	<b>i.</b> Use Cotton coverall and balaclava, ensure proper cleaning of dust from body after work <b>ii.</b> Provision of Eye wash and body shower		
6			Eye Injury/ Itching	Medium	Eye protection goggles and face shield		
7			Fire	Medium	<b>i.</b> Dustproof electrical equipment <b>ii.</b> Control on smoking and ignition sources <b>iii.</b> Spark Extinguishing system in ducting of dust collector <b>iv.</b> Fire Hydrant System		
8			Dust Explosion	Low	<b>i.</b> Prevent accumulation of dust at ceiling, floor and structure <b>ii.</b> Vacuum Cleaning in place of dusting <b>iii.</b> Spark Extinguishing system in ducting of dust collector <b>iv.</b> Explosion relief panel in dust collector and ducting		
9			Disposal of HPL cutting and HPL Dust	Cutting Hazard	Cut injury	Medium	Cut Resistance Gloves
				HPL Dust inhalation	Respiratory Disease	Medium	<b>i.</b> Respiratory Protection Mask <b>ii.</b> Dust Control and Collection System <b>iii.</b> Adequate ventilation in workplace
				Environmental Damage	Soil, Water pollution	Low	Dispose in Co-processing and according to local regulation



## Glossary of terms:

**ACGIH**-AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS  
**ASTM**-AMERICAN SOCIETY FOR TESTING AND MATERIALS  
**ACC**-CLEAN AIR ACT  
**ADR**-INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD  
**CAS**-CHEMICAL ABSTRACTS SERVICES  
**CFR**-CODE OF FEDERAL REGULATIONS  
**CERCLA**- COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT  
**DOT**-DEPARTMENT OF TRANSPORTATION  
**EINECS**: EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES  
**IARC**-INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
**LD<sub>50</sub>**-LETHAL DOSE 50%  
**GHS**-GLOBALLY ORGANIZED SYSTEM  
**HMIS**-HAZARDOUS MATERIAL IDENTIFICATION SYSTEM  
**NFPA**-NATIONAL FIRE PREVENTION ASSOCIATION  
**NTP**-NATIONAL TOXICOLOGY PROGRAMME  
**OSHA**-OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
**PEL**-PERMISSIBLE EXPOSURE LIMIT  
**RCRA**: RESOURCE CONSERVATION AND RECOVERY ACT  
**RID**- INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL  
**STOT, RE**: SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE  
**STOT, SE**: SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE  
**TLV**-THRESHOLD LIMIT VALUE  
**WHMIS**: WORK PLACE HAZARDOUS MATERIAL INFORMATION SYSTEM

**Disclaimer:** The information furnished herein is accurate, to the best of our current state of knowledge. However, we Greenlam Industries Limited assume no liability, what so ever, for the completeness/accuracy of the data contained herein. It is the sole responsibility of the user to determine the suitability. Certain hazards are described herein but we do not claim that these are the only hazards that exist. It is intended as information concerning our products and their application possibilities, and is therefore not intended as any form of guarantee with regard to any specific product characteristic.

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