

Lafex® Material Safety Data Sheet



1. Product and Company Identification

- **PRODUCT NAME:** Lafex® Solid Surface.
- **COMPANY:** Lafex S.A. de C.V.
- **EMERGENCY PHONE:** 011 52 33 3627 0183
- **ADDRESS:** Abel Salgado 55 C, Lomas del Colli, Zapopan.
CP 45037, Jalisco, Mexico.

2. Composition / Information on Ingredients

- **INGREDIENT:** Unsaturated Polyester Resin
- **PERCENT:** 40 ~ 45
- **CAS NUMBER:** Proprietary

- **INGREDIENT:** Alumina Trihydrated
- **PERCENT:** 55 ~ 60
- **CAS NUMBER:** 21645 – 51 – 2

3. Hazards Identification

EMERGENCY OVERVIEW: Lafex® solid surface is not hazardous when shipped. However, operations such as sawing, routing, drilling and sanding can generate dust and irritating fumes. Oversaturated environment of dust can irritate eyes, nose and respiratory passages and cause coughing and sneezing. Even though there are no exposure limits established for dust from Lafex® solid surface, avoid breathing dust.

Lafex® solid surface does not off-gas at room temperature. At higher temperature, a small amount of methyl methacrylate vapors can irritate eyes, skin, nose and throat and can cause allergic skin rashes. Over exposure to methyl methacrylate vapors can cause headaches, nausea, weakness, lung irritation and shortness of breath. Individuals with pre-existing lung or skin diseases may have increased susceptibility to the effects of overexposure to methyl methacrylate.

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CHRONIC (CARCINOGENICITY) INFORMATION: None of the components presents in Lafex® solid surface at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

4. First Aid Measures

- **INHALATION:** Dust from fabrication operations may be harmful or irritating if inhaled. Remove patient from exposure. Obtain medical attention if irritation persists.
- **SKIN CONTACT:** Solid material may be abrasive to or cut skin. Dust from fabrication operations may be harmful or irritating to skin. Wash skin affected area with soap and water. Obtain medical attention if irritation persists.
- **EYE CONTACT:** Dust from fabrication operations may be harmful or irritating to eye. Flush affected eye with water for at least 15 minutes. Remove contact lenses prior to water flush. Obtain medical attention if irritation persists.
- **INGESTION:** Not an expected route of entry with normal use of this product. No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

5. Fire Fighting Measures

Lafex® solid surface material can be combusted only with difficulty. Fire rating is Class A according with ASTM E84-84A test.

FIRE AND EXPLOSION HAZARD DATA:

- **FLASH POINT:** Not applicable.
- **AUTOIGNITION TEMPERATURE:** No data.
- **FLAMMABLE LIMITS (STP):** Not applicable.
- **EXTINGUISHING MEDIA:** Water fog, foam, carbon dioxide, dry chemical, halogenated agents.
- **PROTECTIVE EQUIPMENT:** Self-contained breathing apparatus with full-face piece and protective clothing.

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- **HAZARDOUS PRODUCTS OF COMBUSTION:** Carbon oxides (CO and CO²), Methyl Methacrylate and Styrene.

6. Accidental Release Measures

Review **FIRE FIGHTING MEASURES** and **HANDLING AND STORAGE** sections before proceeding with clean-up.

7. Handling and Storage

- **HANDLING PRECAUTIONS:** Protect exposed skin from cuts and abrasion. Wear protective clothing, heavy-duty gloves and proper safety shoes.
- **STORAGE REQUIREMENTS:** Store in a well ventilated area. Avoid high temperatures. Follow packaging directions. Do not over-stack.

8. Exposure Controls / Personal Protection

- **ENGINEERING CONTROLS:** No special ventilation requirements for product as sold. Provide for appropriate exhaust ventilation and dust collection at machinery. Fabrication operations generate dust or fumes.
- **PERSONAL PROTECTIVE EQUIPMENT:**
 - RESPIRATION (DURING MACHINING OPERATION):** In case of insufficient ventilation, wear appropriate respiratory equipment in compliance with local regulations.
 - EYES (DURING MACHINING OPERATION):** Use tightly fitting safety goggles or face-shield mask.
 - HANDS (DURING MACHINING OPERATION):** Wear protective gloves.
 - ADDITIONAL EQUIPMENT (DURING MACHINING OPERATION):** Use safety shoes, ear protective plugs. Those who are highly sensitivity should take precautions due to possible eye, nose or throat irritation from Lafex® solid surface dust and fumes.

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- **EXPOSURE GUIDELINES:**

Exposure Limits

PEL (OSHA): Particulates (Not Otherwise Classified) 15 mg/m³, 8Hr. TWA, total dust 5 mg/m³, 8Hr. TWA, respirable dust.

TLV (ACGIH): None established.

STYRENE

PEL (OSHA): 100 ppm, 8 Hr. TWA 200 ppm, Ceiling 600 ppm – 5 Min. Max.

TLV (ACGIH): 50 ppm, 213 mg/m³, 8 Hr. TWA, Skin STEL 100 ppm, 426 mg/m³

9. Physical and Chemical Properties

PHYSICAL DATA

- **PHYSICAL STATE:** Solid.
- **ODOR:** None.
- **APPEARANCE:** Sheets and Shaped Articles.
- **% VOLATILES:** 0% At Room Temperature.
- **SOLUBILITY IN WATER:** Not Soluble.
- **SPECIFIC GRAVITY:** 1.6 ~ 1.8 g / cm³.
- **BOILING POINT:** Not Applicable.
- **FREEZING / MELTING POINT:** Not Applicable.
- **FLASH POINT:** Not Applicable.
- **pH:** Not Applicable.
- **IGNITION TEMPERATURE:** Not Applicable.
- **VAPOR PRESSURE (mmHg):** Not Applicable.
- **VAPOR DENSITY:** Not Applicable.
- **VOC:** Not Available.

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10. Stability and Reactivity

- **STABILITY:** Product is stable as supplied.
- **CONDITIONS TO AVOID:** High temperatures.
- **INCOMPATIBILITY WITH DIFFERENT MATERIALS:** None known.
- **THERMAL DECOMPOSITION PRODUCT:**
Frictional heat generated from sawing, routing, drilling and sanding Lafex® solid surface material, can reach or exceed a temperature of 300° C. This is high enough to release a small amount of Methyl Methacrylate vapor.
- **HAZARDOUS DECOMPOSITION PRODUCT:**
Carbon oxides (CO and CO²), Methyl Methacrylate and Styrene.
- **HAZARDOUS POLYMERIZATION:** Will not polymerize.

11. Toxicological Information

- **METHYL METHACRYLATE**
TLV – TWA = 100 ppm = 410 mg / m³; ACGIH (1991-2)
LD50/oral/rat = 7872 mg /kg; RTECS, 47796.
Methyl Methacrylate can be present on machining operations at a concentration exceeding the TLV of 100 ppm. However, it dissipates to very low levels with proper ventilation.
- **TOXICITY TO HUMANS:** This product has not been tested for human effects, but it is not expected to be toxic to humans.
- **TOXICITY TO ANIMALS:** This product has not been tested for animal effects, but it is not expected to be toxic to animals.

12. Ecological Information

- **ECOTOXICITY:** Not Available.
- **BOD5 and COD:** Not Available.
- **BIODEGRADABLE / OECD:** Not Available.
- **AQUATIC TOXICITY:** Expected to be null based on negligible water solubility.

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13. Disposal Considerations

- **WASTE DISPOSAL:**

Preferred disposal methods are (1) recycling, (2) incineration with energy recovery, and (3) landfill.

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State and Local regulations.

14. Transport Information

- **DOT CLASSIFICATION:** Not DOT Regulated.
- **PROPER SHIPPING NAME:** None.
- **MARKING:** None.
- **PACKAGING INSTRUCTIONS:** None.
- **MARINE POLLUTANT:** No.
- **TDG HAZARD CLASS:** None.

15. Regulatory Information

Not classified as hazardous to users or for transport.

- **U.S. FEDERAL REGULATIONS:** In compliance with TSCA Inventory requirements for commercial purposes.
- **STATE RIGHT TO KNOW LAWS:**
No substances on the State Hazardous Substances List, for the states indicated below, are used in the manufacture of products on this MSDS, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various State Hazardous Substance Lists, to the best of our knowledge the products on this MSDS contain no such substances except for those specifically listed below:
WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: NONE.
WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: NONE KNOWN.

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16. Glossary

- ACGIH American Conference of Governmental Industrial Hygienists.
- ASTM American Society for Testing and Materials.
- BOD5 Biological Oxygen Demand in 5 days.
- CAS Chemical Abstracts Services.
- COD Chemical Oxygen Demand.
- DOT Department Of Transportation.
- IARC International Agency for Research on Cancer.
- MSDS Material Safety Data Sheet.
- NTP National Toxicology Program.
- OSHA Occupational Safety & Health Administration.
- OECD Organization for Economic Cooperation and Development.
- PEL Permissible Exposure Limit.
- RTECS Registry of Toxic Effects of Chemical Substances.
- STEL Short Term Exposure Limit (15 minutes).
- STP Standard Temperature and Pressure.
- TDG Transportation of Dangerous Goods (Canada).
- TLV Threshold Limit Value.
- TWA Time Weighted Average.
- TSCA Toxic Substances Control Act.
- VOC Volatile Organic Compounds.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named manufacturer nor any of its subsidiaries assumes any liability whatsoever for accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

END OF MSDS DOCUMENT