

#### 1. PRODUCT NAME

Granium® Classic Series - Pure Acrylic Solid Surface

# 2. SUPPLIER

Silver International Pvt Ltd J-123,2<sup>nd</sup> Floor, Ashok Vihar, Phase-I, Delhi – 110052 (India) Tel: +91-11-45804470

#### 3. CONTACT FOR PRODUCT INFORMATION OR EMERGENCY

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# 4. COMPOSITION / INFORMATION ON INGREDIENTS

Granium® Acrylic Solid Surface is a 100% acrylic solid surface comprised of around 1/3rd acrylic resin i.e. Polymethyl Methacrylate or MMA and 2/3rd natural minerals composed of Aluminum Trihydrate (ATH) derived from bauxite and from which aluminum is extracted (Elongation: DIN 53 445, ISO/DIS 527-78) 0.48 to 0.61%). Materials are not known to contain toxic materials under Title III and Reauthorization Act of 1986 and 40 CFR part 372.

#### **COMPONENTS MATERIAL:**

Methyl Methacrylate (MMA) Polymethyl Methacrylate (PMMA) Aluminum Trihydrate (AL-OH3)

COMPONENT WEIGHT	% BY
Polymethyl Methacrylate	> 30%
Alumina Trihydrate	< 70%
Methyl Methacrylate (Degradation Product)	< 1%

#### 5. HAZARDS IDENTIFICATION

Granium® Acrylic Solid Surface sheet is not hazardous in its original state, however, operations such as sawing, routing, drilling and sanding can generate dust. High concentrations of dust can irritate eyes, nose and respiratory passages and cause coughing and sneezing. Even though there is no exposure limit established for dust from Granium® solid surface sheet (see details in Exposure Controls / Personal Protection section of this MSDS), avoid breathing the dust.

Granium® Acrylic Solid Surface sheet does not give gas at room temperature. At higher temperatures, a small amount of methyl methacrylate may be released. The amount depends on temperature, time and other variables. Methyl methacrylate vapors can irritate eyes, skin, nose and throat and cause allergic skin rashes. Over exposure to methyl methacrylate vapors can cause headache, nausea, weakness, and lung irritation with coughing, discomfort and shortness of breath. Individuals with pre-existing lung or skin problems may be more susceptible to the effects of over exposure to methyl methacrylate.



#### 6. FIRST AID MEASURES

**INHALATION:** Move to Fresh Air **EYE CONTACT:** Not applicable **SKIN CONTACT:** Not applicable **INGESTION:** Not applicable

#### 7. FIRE FIGHTING MEASURES

Pursuant to NEMA LD3, Granium® Acrylic Solid Surface is highly resistant to flame, but if exposed to extremely high temperatures it may be combusted.

**FLAMMABLE PROPERTIES:** Hazardous gases/vapor produced in fire are carbon monoxide, methyl methacrylate, aldehydes.

AFTER SPILLAGE / LEAKAGE / GAS LEAKAGE: Not applicable.

**EXTINGUISHING MEDIA:** Dry powder, foam, carbon dioxide, water spray.

**FIRE-FIGHTING INSTRUCTION:** Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

## 8. ACCIDENTAL RELEASE MEASURES

Not applicable.

## 9. HANDLING AND STORAGE

**HANDLING:** Sheets should be unloaded with a forklift or other lifting device capable of handling pallets safely. If a lifting device is not available, always carry single sheets in the vertical position, and wear heavy- duty protective gloves and proper safety shoes. Carrying should be done by two people facing each other on the short sides with one hand under to support and the other hand on top to control the sheet.

**STORAGE:** Keep sheets flat and evenly supported at temperatures between  $15 \sim 32^{\circ}$  C ( $59^{\circ} \sim 89^{\circ}$  F), in a dry and well-ventilated indoor area. Avoid breathing dust and fumes generated during sawing, routing or drilling.

# 10. EXPOSURE CONTROLS / PERSONAL PROTECTION

**TECHNICAL PROTECTIVE MEASURES:** Provide for appropriate exhaust ventilation and dust collection at machinery.

**PERSONAL PROTECTIVE EQUIPMENT:** Eye/Face protection, safety glasses during operation such as sawing, sanding, drilling or routing.

**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.

HANDS (DURING MACHINING OPERATION): Wear protective gloves.

**OTHERS (DURING MACHINING OPERATION):** Use ear protection, safety shoes. Those who are highly sensitive should take precautions due to possible eye, nose and throat irritation from Granium® acrylic solid surface dust and fumes.

# 11. TOXICOLOGICAL INFORMATION

## SKIN/EYE IRRITATION:

**Polymethyl Methacrylate** – The compound is not a skin or eye irritant and is not a skin sensitizer in animals. Single or repeated ingestion produced mild degenerative changes of liver and kidney.

**Methyl Methacrylate** – The compound is a skin irritant, is a moderate eye irritant and is a skin sensitizer in animals.

Alumina Trihydrate – The compound is untested for skin and eye irritant and is untested for animal sensitization.



# Granium® Classic - Pure Acrylic Solid Surface Material Safety Data Sheet

Acute Toxicity (LC50):

Polymethyl Methacrylate >2MG/1, 4hr LC50 (Inhalation/Rat) Methyl Methacrylate 7093PPM/4hr LC50 (Inhalation/Rat)

Acute Toxicity (LD50):

Polymethyl Methacrylate >2000mg/kg, 4hr LD50 (Oral/Cat) Methyl

Methacrylate 7900 PPM/4hr LD50 (Oral/Cat)

## 12. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Solid sheet COLOUR: Various ODOR: None

**BOILING POINT:** Not applicable **MELTING POINT:** Not applicable

SPECIFIC GRAVITY (WATER = 1): 1.7 ~ 1.8 VAPOR PRESSURE (MMHg): Not applicable VAPOR DENSITY (AIR = 1): Not applicable SOLUBILITY IN WATER: Insoluble

pH: Not applicable

FLASH POINT: Not applicable

**IGNITION TEMPERATURE:** Not applicable

**EXPLOSION LIMITS:** Lower = Not applicable, Higher = Not applicable

0% Volatiles

## 13. STABILITY AND REACITIVITY

**THERMAL DECOMPOSITION PRODUCT:** Frictional heat generated from sawing and routing Granium® Acrylic Solid Surface sheets 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 monoxide, methyl methacrylate monomer, smoke

**HAZARDOUS REACTION: None** 

FURTHER INFORMATION: Sprayed mist may be flammable at temperatures below the flash point.

# 14. ECOLOGICAL INFORMATION

No information available.

## 15. DISPOSAL CONSIDERATIONS

Can be land filled or incinerated, when in compliance with local regulations. The owner of the materials is responsible for proper waste disposal.

## 16. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

# 17. OTHER INFORMATION

The data in this Material Safety Data sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Do not use in medical applications involving permanent implantation in the human body.