

SchemaR[®] MATERIALS SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking

Product name : SchemaR SHEET Company : Soft chemical co., ltd.

Emergency Telephone NO.: 82-43-275-1665

Address: 63, Geumhoseonmal-gil, Bugang-myeon, Sejong-si, Korea

2. Composition/information on ingredients

Ingredient : ACRYLIC POLYMER
Ingredient Sequence Number : 01

Percent: 40 ~ 45

CAS Number: 9011 - 14 - 7

Ingredient: Hydrated Alumina, Aluminum Hydroxide, Aluminum Trihydroxide

Ingredient Sequence Number: 02

Percent : 55 ~ 60

NIOSH(RTECS) Number: BD094000 CAS Number: 21645 - 51 - 2

3. Hazards identification

"SchemaR SHEET" is not hazardous as shipped. However, operations such sawing, routing, drilling and sanding can generate dust. High concentrations of dust can irritate eyes, nose and respiratory passages and cause coughing and sneezing. Since there are no exposure limits established for dust from "SchemaR SHEET".(See details in the Exposure Controls/Personal Protection Section of this MSDS) "SchemaR SHEET" does not offgas at room temperature. At higher temperature, small amounts of methyl methacrylate can be released, the amounts of which are dependent upon temperature, time and other variables. methyl methacrylate vapors can irritate eyes, skin, nose and throat and can cause allergic skin rashes.

Overexposure to vapors of methyl methacrylate can cause headache, nausea, weakness and lung irritation with cough, discomfort and shortness of breath.

Individuals with preexisting diseases of the lungs or skin may have increased

susceptibility to the effects of overexposure to methyl methacrylate.

4. First Aid Measures

Inhalation: Move to fresh air. Eye contact: Not applicable Skin contact: Not applicable Ingestion: Not applicable

5. Fire Fighting Measures

After spillage/leakage/gas leakage : Keep away from sources of ignition. Ensure adequate ventilation. Use personal protective equipment.

Soak up with inert absorbent material.

Clean with detergents. Avoid solvents.

Extinguishing media: Dry powder, foam, carbon dioxide, water spray

6. Accidental Release Measures

Review fire fighting measures and handing sections before proceeding with clean-up. Use appropriate personal protective equipment during clean-up.

7. Handling and Storage

Do not breathe dust.

8. Exposure Controls/Personal Protection

Technical protective measures : Provide for appropriate exhaust ventilation and dust collection at machinery.

Personal protective equipment:

Respiration (During machining operation): In case of insufficient ventilation wear suitable respiratory equipment.

Eyes (During machining operation): Tightly fitting safety goggles or face-shield.

Hand (During machining operation): Leather gloves or thick fabric gloves.

Other (During machining operation): Ear protection, safety shoes people with unusually high sensitivity may experience eye, nose or throat irritation from SchemaR dust and fumes and should take precautions.

9. Physical and Chemical Properties

Form : Solid Sheet Color : Various

Ordor: NONE

Boilng Point : Not Applicable Melting Point : Not Applicable

Specific Gravity (Water = 1) : $1.6 \sim 1.8$ 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

Upper = Not Applicable

10. Stability and Reactivity

Thermal decomposition product : Frictional heat generated from sawing routing SchemaR SHEET can each or exceed temperature of 300 °C. This is high enough to release small of methyl methacrylate vapor.

Hazardous Decomposition Product : Carbon monoxide, methyl methacrylate monomer, smoke

Hazardous Reaction: None

Further information : spray mist may be flammable at temperature below the flash point

11. Toxicological Information

Methyl methacrylate

TLV TWA = $100 \text{ ppm} = 410 \text{ mg/m}^3 \text{ ACGIH } (1991 2)$

LD50/oral/rat = 7872 mg/kg; RTECS, 47796

Methyl methacrylate can be present, at the cutting tool face, at a concentration exceeding the TLV of 100 ppm. however, it dissipates with good ventilation to very low levels.

12. Ecological Information

No information available

13. Disposal Considerations

Can be landfill or incineration, when in compliance with local regulations.

14. Transport Information

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory Information

U.S. Federal Regulations

TSCA Inventory Status : In compliance with TSCA Inventory requirments for commercial purposes.

16. Other Information

Additional Information

Do not use in medical applications involving permanent implantation in the human body.

We hereby certify that the above statements are true and correctin every respect. If the statements are not true, all responsibility will belong to Soft Chemical co., ltd..

Signature/Issued Date:

SchemaR[®] Soft chemical co., ltd.

Revised 01.05.2014