

MATERIAL SAFETY DATA SHEET - COSHH



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1. MATERIAL IDENTIFICATION AND USE

Chemical Name	Handrails System made of Fiberglass Reinforced Polyester
Trade name	DURARAIL®
Common Name	Glass Reinforced Plastics (GRP/FRP) Handrail (Fiberglass Handrail)
Use	Construction and Sewerage Use

2. INGREDIENTS

Fibrous Glass, Polyester Resin, Catalyst (Peroxyester), Styrene, Aluminum Oxide, Pigments, Ingredients are chemically cured and bonded together

3. HAZARD IDENTIFICATION AND PHYSICAL DATA

Acute Effect	None by contact. Dust produced by cutting or grinding can penetrate the pores of the skin causing itching. Avoid breathing dust.
Routes of Entry	Skin contact or inhalation of dust when cutting
Medical Note	People who have a condition that could be aggravated by dust should avoid cutting or grinding.
First Aid Procedures	Skin – Remove person from dust area and shower with soap and water until itching stops. Eyes – Flush at once with sterile eye with solution.

APPEARANCE AND ODOR Angular or round multicolored particles. No odor.	SPECIFIC GRAVITY 1.55 - 1.80
BOILING POINT (At 1 Atm): Not applicable	VAPOR DENSITY IN AIR (Air = 1) Not applicable
VAPOR PRESSURE (mm Hg @ 20°C) 0	% VOLATILE, BY VOLUME 0%
EVAPORATION RATE (at 1 Atm, and 25°C; n-butyl acetate = 1): 0	SOLUBILITY IN WATER 0%

4. REACTIVITY DATA

STABILITY Stable	CONDITIONS TO AVOID Avoid contact with incompatible materials (see below).
INCOMPATIBILITY (Materials to avoid) Contact with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride may cause fire and/or explosions. Silica dissolves in hydrofluoric acid producing a corrosive gas - silicon tetrafluoride.	
HAZARDOUS DECOMPOSITION PRODUCTS Silica-containing respirable dust particles may be generated by handling.	
HAZARDOUS POLYMERIZATION Not known to polymerize	

5. CHEMICAL DATA

Appearance Solid, flat panels with grid pattern. Green, Grey and Yellow are standard colours. Sharp edges or grit applied to top surface. Nil odours. Not soluble in water. Specific Gravity 1.5-1.8

6. FIRE FIGHTING MEASURE

Products are addicted with fire retardant resin to BS 476 Part 6 and Part 7. Avoid direct fire source. Flash point: none. Flammability limits: none. Extinguishing Media, Water, foam, A, B or C fire extinguishers. Heavy, black smoke, Carbon particles. Use air respirator.

7. TOXICITY AND FIRST AID

EXPOSURE LIMITS (When exposure to this product and other chemicals is concurrent, the exposure limit must be defined in the workplace). Unless specified otherwise, limits are expressed as eight-hor-time-weighted averages (TWA). Limits for cristobalite and tridymite (other forms of crystalline are equal to one-half of the limits for quartz.

ABBREVIATIONS: TLV = threshold limit value of the American Conference of Governmental Industrial Hygienists (ACGIH); MSHA PEL = permissible exposure limit of the Mine Safety and Health Administration (MSHA); OSHA PEL = permissible exposure limit of the Occupational Safety and Health Administration (OSHA); mg/m³ = milligrams of substance per cubic meter of air.

Other Particulates: TLV = 10 mg/m³ (inhalable/total particulate, not otherwise classified), TLV = 3 mg/m³ (respirable particulate, not otherwise classified); OSHA PEL = 15 mg/m³ (total particulate, not otherwise regulated), OSHA PEL = 5 mg/m³ (respirable particulate, not otherwise regulated). **Respirable Crystalline Silica (quartz):** TLV = 0.1 mg/m³; MSHA and OSHA PEL = 10 m/mg³ + (%SiO₂ + 2); MSHA-Proposed and OSHA-Proposed PEL = 0.1 mg/m³; **Respirable Dust:** MSHA and OSHA PEL = 10 m/mg³ + (%SiO₂ + 2) **Total Dust:** MSHA PEL = 30 m/mg³ + (%SiO₂ + 3); OSHA PEL = 30 m/mg³ + (%SiO₂ + 2)

ACGIH, MSHA, and OSHA have determined that adverse effects are not likely to occur in the workplace provided exposure levels do not exceed the appropriate TLVs/PELs. However, because of the wide variation in individual susceptibility, lower exposure limits may be appropriate for some individuals including persons with pre-existing medical conditions such as those described below

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Inhaling respirable dust and/or crystalline silica may aggravate existing respiratory system disease(s) and/or dysfunctions. Exposure to dust may aggravate existing skin and/or eye conditions.

PRIMARY ROUTE(S) OF EXPOSURE: X Inhalation X Skin Ingestion

ACUTE TOXICITY:

EYE CONTACT: Direct contact with dust may cause irritation by mechanical abrasion

SKIN CONTACT: Direct contact may cause irritation by mechanical abrasion.

INGESTION: Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

INHALATION: Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate exposure limits.

Use of natural sand and gravel for construction purposes is not believed to cause additional acute toxic effects. However, repeated overexposures to very high levels of respirable crystalline silica (quartz, cristobalite, tridymite) for periods as short as six months have caused acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include (but are not limited to): shortness of breath, cough, fever, weight loss, and chest pain.

FIRST AID

EYES: Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while hold the eyelid(s) open. Occasionally life the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops.

SKIN: Wash with soap and water. Contact a physician if irritation persists or later develops.

INGESTION: If person is conscious, give large quantity of water and induce vomiting; however, never attempt to make an unconscious person drink or vomit. Get immediate medical attention.

INHALATION: Remove to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

8. STORAGE AND HANDLING PRECAUTIONS

This product is not intended or designed for use as an abrasive blasting medium or for foundry applications, and should not be used for these purposes.

Follow the personal protection and controls set forth in Section 7 of this MSDS when handling this product. Do not store near food and beverages or smoking materials.

9. SPILL, LEAK, AND DISPOSAL PRACTICES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

The personal protection and controls identified in Section 7 of this MSDS should be applied as appropriate.

Spilled materials, where dust can be generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Do not dry sweep spilled material.

This product is not subject to the reporting requirements of Title III of SARA, 1986 and 40 CFR 372.

WASTE DISPOSAL METHOD

Pickup and reuse clean materials. Dispose of waste materials only in accordance with applicable federal, state, and local laws and regulations.

10. TRANSPORTATION

DOT HAZARD CLASSIFICATION

None

PLACARD REQUIRED

None

LABEL REQUIRED

Label as required by the OSHA Hazard Communication standard [29 CFR 110.1200 (f)] and applicable state and local laws and regulations.

For Further Information

Contact:

Yeungs Fiberglass Company
Unit F, 23/FL., CNT Tower,
338 Hennessy Road,
Wanchai, Hong Kong.
8 AM - 5 PM
Monday through Saturday

Notice: Yeungs Fiberglass Company believes that the information contained on this Material Safety Data Sheet (MSDS) is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance. Also, the suggestions should not be confused with or followed in violation of applicable laws, regulation, rules or insurance requirements. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.