

MATERIAL SAFETY DATA SHEET

Section I - PRODUCT INFORMATION

Supplier: Fibres JASZTEX Fibers inc.

61 boul. Hymus, Pointe-Claire,

Quebec, H9R 1E2

Telephone number for information:

514 697 3096

Date prepared:

April 2007

Product: Item numbers: Rolls of Bonded Polyester All TBF identified products

Section II - HAZARDOUS COMPONENTS

There is no known hazardous material used in this product. All new textile material made of a Polyester matrix fiber (Polyethylene Terephthalate) with a copolyester binder fiber. This product may contain up to 0.5% titanium dioxide (TiO2) and/or other pigments. We don't believe TiO2 and/or pigments present a significant hazard. The fibers are coated with one or more surface finishes at total levels less than 1.0% weight of fiber.

Section III - FIRE AND EXPLOSION HAZARD DATA

Flammability conditions: Combustible solid

Flash point: N/A
Flammable limits in air: N/A
Auto-ignition temperature N/A
Unusual Fire and Explosion Hazards: None

Fire extinguishing media: For class "A" fires. Ordinary combustibles.

Fire-fighting procedures: Routine for class "A" fires, synthetic content may

produce irritating smell in smoldering fire.

Dangerous combustion products: May emits toxic fumes under fire conditions.

Section IV - LEAK PROCEDURES N/A

Section V - PHYSICAL DATA

Physical state: White Highloft textile material

Solubility in water: None

Appearance and odour: New textile material has no unusual odour in normal

conditions

Percentage volatile (by volume) N/A

From 0.9 to 1.5 lb/cubic foot

Density:

N/A

Vapour density & pressure: Melting point

Melting will occur between 165 and 275°C

Evaporation rate

N/A

Section VI - REACTIVITY DATA

Product is chemically stable and has no specific incompatibility with other products. It is resistant to oils, solvents, weak acids and weak alkalis.

Section VII - HEALTH HAZARD INFORMATION

Results from toxicity studies suggest that these fibers would pose no significant health problems under normal conditions of handling and use.

Inhalation

N/A

Skin

It may have a low order of dermal toxicity.

Eyes

N/A

Ingestion

N/A

Section VIII - EMERGENCY AND FIRST AID PROCEDURES

Although not expected, if allergic symptoms are observed, remove persons to fresh air and discontinue exposure to the product.

Inhalation

N/A

Skin

None N/A

Eyes Ingestion

N/A

Section IX - PREVENTIVE MEASURES

Steps to be taken in case of material is released or spilled: None

Waste disposal method:

No special procedure. Discard with

other solid waste.

Precautions to be taken in handling and storing:

None

Other precautions:

None

Section X - PREPARATION

Issued by:

Bruno Fournier, eng.

The above information is believed to be correct as of the date hereof, however, no warranty of the merchantability, fitness for any use, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information. The results to be obtained from the use of this information and the product are furnished on the condition that the person receiving them shall make his/her own determination as to the suitability of product for his/her particular purpose and on the condition that he/she assume the risk of his/her use thereof.



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name: INTREPID® FILTRATION MEDIA

Product Number: 250W, 352H, 353H, 354H, 355H, 355W, 358H, 359H, 364H, 365H, 374H, 411H, 411SF, 413H, 413SF, 605L, 612L, 616L, 621L, 629L, 654L, 684L, 854L, 954L

| Date Prepared: | 11/6/2008 |
|---|--|
| Manufacturer: | Kimberly-Clark Corporation 1400 Holcomb Bridge Road Roswell, GA 30076-2199 United States of America |
| Telephone: MEDICAL EMERGENCY TRANSPORTATION EMERGENCY INFORMATION | 1-877-561-6587 Chemtrec 1-800-424-9300 1-888-346-4652 |

Product Use: Air Filters for HVAC Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No./EINECS- No | % | EU Classification (67/548/EEC): |
|------------------|----------------------------|---------|---------------------------------|
| Polyolefin | 9003-07-0, 26221-73- 8 | 90-100% | Not applicable |
| Titanium Dioxide | 13463-67-7 / 236-675- 5 | 1-5% | Not applicable |

3. HAZARDS IDENTIFICATION

Emergency Overview: White or colored solid. This product is not a hazardous material. Dust may form explosive mixture in air. Inhalation of dust that may be generated from cutting or other processing of product may cause mucous membrane and upper respiratory irritation.

EU Classification (1999/45/EC): Not classified as a dangerous substance or preparation.

US OSHA Classification (29CFR1910.1200): Carcinogen

Canadian WHMIS Classification: Class D-2-A

4. FIRST AID MEASURES

Inhalation: No first aid should be needed.Skin contact: No first aid should be needed.



Eye contact: No first aid should be needed.

Ingestion: No first aid should be needed.

5. FIRE-FIGHTING MEASURES

Flashpoint: Not applicable

Autoignition temperature: >600°F (315°C) Flammable Limits in Air % by Volume:

LEL (Lower): Not applicable UEL (Upper): Not applicable

Suitable Extinguishing Media: Water, water fog, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: In the event of fire, wear self-contained breathing

apparatus.

Unusual Fire and Explosion Hazards: Dust may form explosive mixture in air.

6. ACCIDENTAL RELEASE MEASURES

Pick up and place in a suitable container for use or disposal. Avoid dust formation.

7. HANDLING AND STORAGE

This product is not a hazardous material. Minimize the generation and accumulation of dust. Store in a dry, well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s)

| Polyolefin | 15 mg/m3 PEL-TWA (total dust) 10 mg/m3 TLV-TWA (inhalable dust)as PNOS (particulates not otherwise specified) |
|------------------|---|
| Titanium Dioxide | 15 mg/m3 PEL-TWA (total dust) 10 mg/m3 TLV-TWA (inhalable dust) |

Ventilation: No special ventilation normally required. Provide appropriate exhaust ventilation at places where dust is formed.

Respiratory Protection: No personal respiratory protective equipment normally required. If the exposure limit is exceeded or for symptoms of overexposure, wear an appropriate NIOSH (or local authority) certified respirator.

Protective Gloves: Not required.

Eye Protection: Follow facility requirements.



| 9. PHYSICAL AND CHEMICAL PRO | OPERTIES |
|--|-------------------------|
| Appearance and Odor | White or colored solid. |
| Boiling point/range | Not applicable |
| Melting point/range | 257°F (125°C) |
| Specific Gravity (water=1) | Not available |
| Vapor pressure | Not applicable |
| Vapor density (air=1) | Not applicable |
| Solubility | Insoluble |
| pH | Not applicable |
| Partition coefficient (n-octanol/water): | Not applicable |
| Evaporation Rate (Butyl acetate=1) | Not applicable |
| Percent Volatile by Volume (%) | 0 |
| Volatile Organic Carbon Compounds (VOC) (g/L) | None. |

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Keep away from open flames, hot surfaces and sources of ignition.

Materials to avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Does not occur.

11. TOXICOLOGICAL INFORMATION

Symptoms/Effects of Overexposure:

Inhalation: Inhalation of dust that may be generated from cutting or other processing of product may cause mucous membrane and upper respiratory irritation.

Skin contact: None expected.

Eye contact: None expected.

Ingestion: No unusual hazards expected.

Chronic toxicity: Prolonged overexposure to dust may cause lung changes.

Medical Conditions Aggravated by Exposure: None currently known.

Carcinogenicity Data: Titanium dioxide is classified by IARC as a group 2B carcinogen, possibly carcinogenic to humans. The titanium dioxide in this product is bound in a polymer



matrix so no exposure occurs during normal use and handling. None of the other components of this product is listed as a carcinogen by IARC, NTP, US OSHA or the European Directive (67/548/EEC).

Reproductive Toxicity: No adverse effects on reproduction are known.

Acute Toxicity Values: No data available

12. ECOLOGICAL INFORMATION

No adverse effects on the environment are expected.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all state, local and federal regulations.

14. TRANSPORT INFORMATION

US DOT Shipping Description: Not regulated

IATA Shipping Description (Air): Not regulated

IMDG Shipping Description (Vessel): Not regulated

15. REGULATORY INFORMATION

US Regulations

EPA Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA Inventory or exempted from TSCA.

SARA 302 Listed Chemicals: None.

SARA 311/312 Hazard Categories: Chronic Health

SARA 313 This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under the SARA Section 313 (40 CFR 372): Barium compounds 1-5%

California Proposition 65: This product does not contain chemicals listed per the Safe Drinking Water and Toxic Enforcement Act of 1986.

International Regulations

Canadian WHMIS Classification: Class D-2-A

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU Labeling: Not applicable



16. OTHER INFORMATION

HMIS Rating: Health 0 Fire 1 Reactivity 0

Revision Summary: Revision to section(s) 3, 11, 15.

The information contained herein is true and correct to the best of Kimberly-Clark's knowledge. However, no warranty, express or implied, is made. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any laws or regulations. Final determination of the suitability of the material is the sole responsibility of the user.

Intrepid 508 Gas Phase Media - Performance Comparison

| | | Toluene Absorption* | Carbon Loading | Diff. Pressure | MERV | E 1 | 五 | 臣 |
|-----------------|-------------------------|---------------------|----------------|----------------|---------|------------|---------|---------|
| Media | Filter Size | (mg/m2) | (g/m2) (ir | (in. H2O) | (Value) | (% Avg) | (% Avg) | (% Avg) |
| Product A | $16 \times 20 \times 1$ | 5 400 | 200 | 6,79 | 10 | 21 | 99 | 85 |
| Product B | $16 \times 25 \times 1$ | 7 000 | 0,05 | 0,24 | 7 | 10 | 41 | 53 |
| Product C | $24 \times 24 \times 2$ | 7 900 | R | 0,30 | 7 | 20 | 55 | 70 |
| Product D | $16 \times 20 \times 4$ | 17 000 | 200 | 0,65 | 7 | 21 | 53 | 63 |
| Intrepid 508 GP | $24 \times 24 \times 2$ | 25 000 | 25 | 0,35 | ∞ | 17 | 51 | 71 |
| | | | | • | | | | |

ISO TS 1155-2 Air Filters for Passenger Compartments: Part 2 Test for gasesous filtration st

international standard developed for testing the efficiency of media in removing gaseous contaminants and only one that exists.

Several reference gases may be used, but toluene is most relevant, as the most prevelant in indoor air.

The media is challenged with 80 ppm of toulene at an airflow of 60 rate fpm.

Detectors placed before and after the media in the airstream detect concentration of toulene. The percent penetration over time is recorded, from which a curve is graphed.

The integral under the inverse of the curve is used to calculate the toulene retention of the media in mg per m.

Test Conditions: Toulene concentration = 80 ppm / Air Flow Rate = 60 fpm / Temperature = 70 F / Flat sheet size = 55

Intrepid 508 Gas Phase Toulene Retention Graph

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US Department of Labor cupational Safety and Health Administration This MSDS Complies with 29 CFR 1910.1200 (THE HAZARDOUS COMMUNICATION STANDARD)

Form: SFI-0001 Page 1 of 3 IDENTIFY (AS USED ON LABELS AND LISTS): Glass Fiber Air Filtration Media (Air Media) - HVAC SECTION I MANUFACTURER'S NAME: Superior Fibers, LLC 15 May 2008 REVISED: 499 North Broad Street ADDRESS: SUPERSEDES: All Others Bremen, Ohio 43107-0089 (740) 569-4175 TELEPHONE NUMBER FOR INFORMATION: (740) 569-4175 EMERGENCY TELEPHONE NUMBER: SECTION II --- HAZARDOUS INGREDIENTS / IDENTITY INFORMATION HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY, COMMON NAME (S): Other Limits **ACGIHTLY** Recommended Glass Fibers (Nuisance particles, Non-Respirable) 10 mg/m10 mg/m N/A None Est. None Est. Cured Urea Formaldehyde Resin N/A Polybutene Emulsion None Est. None Est. N/A May contain quantities of Oil AG (Dust Adhesive) Propylated Triphenyl Phosphate - Phosfiex 41-L 94 80% 1:000 3.000 M/A 1.35% Sorbitan Monoleurate - Sorbax SML N/A N/A N/Λ 3.85% Silicon Dioxíde - Aerosil 200 N.L. N/A N/A .00175% Tinopal SFP N/A N/A N.L.= Not Listed N.A.= Not Available N/A= Not Applicable SECTION III PHYSICAL / CHEMICAL CHARACTERISTICS N/A SPECIFIC GRAVITY (H20=1): N/A BOILING POINT: VAPOR PRESSURE: N/A MELTING POINT; N/A VAPOR DENSITY: N/A EVAPORATION RATE (BUTYL ACETATE=1): N/A SOLUBILITY IN WATER: Insoluble APPEARANCE AND ODOR: Free-form, lofted glass fibers, many colors, no odor. SECTION IV --- FIRE AND EXPLOSION HAZARD DATA FLASH POINT (METHOD USED): Open Cup FLAMMABLE LIMITS: N/A Deg. F.: 380+ LEL N/A UEL N/A EXTINGUISHING MEDIA: Water fog - CO2 Dry chemical - Multipurpose foam. SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus. Material is self extinguishing in bulk roll form. Basic media carries a Class 2 fire rating listing by Underwriters Laboratories, Inc. UNUSUAL FIRE FIGHTING HAZARDS: If present - Triaryl Phosphate, when exposed to open flame, will emit

toxic acid vapors that are formed from Phosphorous Oxide.

| SECTION V REACTIVITY DATA |
|--|
| STABILITY: Unstable Conditions to Avoid; None Stable _X |
| INCOMPATABILITY (MATERIALS TO AVOID): None |
| HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Will not occur |
| HAZARDOUS May Occur Conditions to Avoid: None |
| POLYMERIZATION May Not Occur X |
| SECTION VI — HEALTH HAZARD DATA |
| ROUTE(S) OF ENTRY: INHALATION? No SKIN? Yes INGESTION? No EYES? Yes |
| HEALTH HAZARDS (ACUTE AND CHRONIC): |
| Skin Contact: May produce allergic reaction in sensitive individuals. No long term effects have been identified. |
| Eye Contact: Avoid by use of protective equipment. Seek medical treatment if irritation persists. |
| Inhalation: None |
| Ingestion: None |
| CARCINOGENICITY: NTP? No IARC MONOGRAMS? No OSHA REGULATED? No |
| SIGNS AND SYMPTOMS OF EXPOSURE: |
| Skin: Redness and/or rash in sensitive individuals. |
| Eyes: Irritation and/or burning sensations. |
| Inhalation: None |
| Ingestion: None |
| MEDICAL CONDITIONS GENERALLY AGGREVATED BY EXPOSURE: None known. Sensitive individuals will experience increased discomfort with repeated unprotected exposure. |
| EMERGENCY AND FIRST AID TREATMENT: |
| Skin: Wash exposed areas with soap and water after exposure. Wash before all meals. |
| Eyes: Flush eyes repeatedly with large quantities of water. Seek medical help if irritation persists. |
| Inhalation: None |
| Ingestion: None |
| Notes |
| |
| |

SECTION VII --- PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: None required. Solid non-toxic material.

WASTE DISPOSAL METHOD: Clean material can be disposed of in approved landfills according to local, state, and federal regulations. Disposal of contaminated (spent) media will be governed by the particulate that has been captured by the filter. Check all local, state and federal regulations pertaining to the contaminate.

PRECAUTION S TO BE TAKEN IN HANDLING AND STORING: No special handling required.

OTHER PRECAUTIONS: Wear protective clothing, gloves and eye protection.

SECTION VIII --- CONTROL MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE); Wear a dust mask to filter inhalation if cutting, sanding, or grinding products that contain glass fibers.

VENTILATION LOCAL EXHAUST: Yes SPECIAL: N/A

MECHANICAL (GENERAL): Yes OTHER: N/A

PROTECTIVE CLOTHING OR EQUIPMENT:

Gloves: Mandatory impervious gloves

Eye Protection: Yes, avoid any eye contact - Side shields on all eyeglasses, recommended.

Other Protective Clothing or Equipment: None required. Barrier creams can be of help to ultra sensitive individuals. Recommend long sleeve, loose fitting, shirts be worn by sensitive individuals. It is recommended to wash work clothing separate from other laundry. Rinse washer at the end of a cycle.

WORK/HYGIENIC PRACTICES:

Follow normal work / hygienic practices. Avoid using compressed air for work area clean-up. Recommend using wet sweep or filtered vacuum.

The information contained herein is believed to be true and accurate, but is not warranted to be, whether originating with the company or not. Customers are advised to confirm that the information is current, applicable and suitable to their circumstances.