

Safety Data Sheet



Cellulose Containerboard

1. Product Identification

TRADE NAME (AS LABELED): Containerboard, Corrugated Sheets, Linerboard, White Top Liner, Medium, Bleached Linerboard, Coated White Top Linerboard

SYNONYMS: Kraft Linerboard, White Top Liner, Recycled Linerboard, Recycled Medium, Fluting, Bleached Kraft Linerboard, White Top Kraft Liner

CHEMICAL NAME/CLASS: Cellulose Containerboard-Paper Sheet.

MANUFACTURER'S NAME: Freedom Corrugated

ADDRESS: 595 Oak Ridge Rd. Hazleton Pa 18202

EMERGENCY PHONE: 570-384-7500

BUSINESS PHONE: 570-384-7500

2. Hazard Identification

Signal Word(s): **WARNING**

NOTE: This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous as the result of downstream activities (e.g. cutting, processing) that reduces its particle size resulting in potential hazards as described below.

Product Classification	Hazard Statement(s)	Pictogram
Combustible Dust (OSHA Defined Hazard)	If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air	None

Precautionary Statement(s):

Prevention Statements: Caution should be taken in the processing, shipping, handling and use of these materials, particularly if they are in a dry state and dust is produced. Keep away from sparks, flame or other heat sources and take precautionary measures against static discharge.

Response Statements: Not applicable.

Ingredients of Unknown Acute Toxicity (>1%): NAP

3. Composition/Information on Ingredients

Component	CAS#	EC#	Wt %
Cellulose (C ₆ H ₁₀ O ₅) _n	65996-61-4	265-995-8	90 - 95
Calcium carbonate (CaCO ₃)	471-34-1	207-439-9	0 – 10
Starch (C ₆ H ₁₀ O ₅) _n	9005-25-8	232-679-6	0 – 1

4. First Aid Measures

Ingestion: Not likely to occur for product during normal use.

Eye Contact: Dust may mechanically irritate the eyes, resulting in redness or watering. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

Skin Contact: Not anticipated for product in purchased form, wash with mild soap and water.

Skin Absorption: Product is not absorbed through the skin.

Inhalation: Excessive dust concentrations may cause unpleasant obstruction in the nasal passages. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

Note to Physician: No special advice, treat symptomatically.

Acute Symptoms/Effects- Cellulose dust can cause eye irritation and obstruction in the nasal passages.

Delayed Symptoms/Effects – No delayed effects expected.

5. Fire-Fighting Measures

Flash Point (Method Used): Not available for finished product.

Flammable Limits: LFL = **NOTE:** See below under "Unusual Fire and Explosion Hazards" UFL = Not available

Extinguishing Media: Use water, dry chemical, carbon dioxide or foam as appropriate for surrounding fire.

Autoignition Temperature: 450 °F

Special Firefighting Procedures: As in any fire wear NIOSH-approved self-contained breathing apparatus and appropriate protective clothing.

Unusual Fire and Explosion Hazards: Linerboard processing (e.g. fiberization) may result in the release of cellulose fibers. Linerboard as supplied and shipped is highly unlikely to release sufficient dust to constitute a combustible dust explosion hazard. Depending on airborne concentration, moisture content, particle diameter, surface area and exposure to an ignition source, airborne cellulose dust may ignite and burn with explosive force in a contained area. Cellulose dust may similarly deflagrate (combustion without detonation like a supersonic explosion) if ignited in an open or loosely contained area. Cellulose dust explosibility: (*K_{st} dry = >200 and < 300 bar m/s). Caution should be taken in the processing, shipping, handling and use of these materials, particularly if they are in a dry state and dust is produced. Reference NFPA standards 654, 69 and the NFPA *Fire Protection Handbook* for guidance.

*K_{st} the maximum rate of pressure rise is used to calculate the K_{st} value; an internationally recognized index used to classify dust explosibility.

NFPA Rating (Scale 0-4): Health = 0 Fire = 1 Reactivity = 0

6. Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of cellulose dust on exposed surfaces. Use NIOSH approved filtering face piece respirator ("dust mask") and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort.

Other Precautions: Minimize compressed air blowdown or other practices that generate high dust levels.

7. Handling and Storage

Precautions to be Taken In Handling and Storage: Minimize dust generation and accumulation. Keep in cool, dry place away from open flame and other sources of ignition. Maintain good housekeeping to avoid accumulation of cellulose dust on exposed surfaces. Cellulose dust may pose a combustible dust hazard.

Because of the size of the rolls or bales, physical hazards are the predominant hazards. Safety shoes should be worn when moving rolls by hand or hand tools. Bales and rolls should be stored on flat, clean and even surfaces to prevent tipping over. All paper material should be stored away from open flames.

8. Exposure Control Measures, Personal Protection

Exposure Limits/Guidelines:

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Cellulose (C ₆ H ₁₀ O ₅) _n	65996-61-4	90-95	OSHA	PEL-TWA 15 mg/m ³ (PNOR) ¹	Total dust
			OSHA	PEL-TWA 5 mg/m ³ (PNOR) ¹	Respirable dust
			ACGIH	TLV [®] -TWA 10 mg/m ³ Cellulose	Total dust
Calcium carbonate (CaCO ₃)	471-34-1	0-10	OSHA	PEL-TWA 15 mg/m ³ (PNOR) ¹	Total dust
			OSHA	PEL-TWA 5 mg/m ³ (PNOR) ¹	Respirable dust fraction
			ACGIH	TLV [®] -TWA 10 mg/m ³ (PNOS) ²	Inhalable particulate
			ACGIH	TLV [®] -TWA 3 mg/m ³ (PNOS) ²	Respirable particulate
Starch (C ₆ H ₁₀ O ₅) _n	9005-25-8	0-1	OSHA	PEL-TWA 15 mg/m ³	Total dust
			OSHA	PEL-TWA 5 mg/m ³	Respirable dust fraction
			ACGIH	TLV [®] -TWA 10 mg/m ³	Total dust

¹OSHA particulate not otherwise regulated (PNOR)

²ACGIH particulate not otherwise specified (PNOS)

8. Exposure Control Measures, Personal Protection (cont'd.)

Personal Protective Equipment:

RESPIRATORY PROTECTION – Use NIOSH-approved filtering face piece respirator (“dust mask”) and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort or symptom relief when fiberization of the linerboard occurs. Use respiratory protection in accordance with regulatory requirements such as the OSHA respiratory protection standard 29 CFR 1910.134.

PROTECTIVE GLOVES – Not required. However, cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation or cuts from handling product.

EYE PROTECTION – Approved goggles or tight fitting safety glasses are recommended when excessive exposures to dust may occur (e.g. during clean up) and when eye irritation may occur.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT – Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

WORK/HYGIENE PRACTICES – Follow good hygienic and housekeeping practices. Clean up areas where cellulose dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met. Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation, and process enclosure if necessary, to control airborne dust. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of cellulose dust within the system. See “SPECIAL” section below.

MECHANICAL (GENERAL) – Provide general ventilation in processing and storage areas so that exposure limits are met.

SPECIAL – Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.

9. Physical/Chemical Properties

Physical Description: Paper sheets, rolls, or bales. Brown in color or white if bleached.

Boiling Point (@ 760 mm Hg): Not applicable

Evaporation Rate (Butyl Acetate = 1): Not applicable

Freezing Point: Not applicable

Melting Point: Not applicable

Molecular Formula: Not applicable

Molecular Weight: Not applicable

Oil-water Distribution Coefficient: Not applicable

Odor Threshold: Not available

pH: Not applicable

Solubility in Water (% by weight): Not applicable

Specific Gravity (H₂O = 1): 0.6-0.8

Vapor Density (air = 1; 1 atm): Not applicable

Vapor Pressure (mm Hg): Not applicable

Viscosity: Not applicable

% Volatile by Volume (@ 70°F (21°C)): Not applicable

10. Stability and Reactivity

Stability: ☐ Unstable ☒ Stable

Conditions to Avoid: Not applicable

10. Stability and Reactivity (cont'd.)

Incompatibility (Materials to Avoid): Avoid open flame, sparks and other sources of ignition.

Hazardous Decomposition or By-Products: Combustion products include carbon monoxide, carbon dioxide and fine particulate in the form of smoke.

Hazardous Polymerization: ☐ May occur ☒ Will not occur

Sensitivity to Mechanical Impact: Not applicable

Sensitivity to Static Discharge: Not applicable

11. Toxicological Information

Likely Route(s) of Exposure:

Inhalation and eyes.

Signs and Symptoms of Exposure:

Acute Health Hazards: Not applicable for product in purchased form. Dust may be a mechanical irritant to the eyes and cause obstruction in the nasal passages.

Chronic Health Hazards: Cellulose (pulp) dust has not been shown to produce significant disease or toxic effects when exposure limits are met. Cellulose is poorly soluble and has a low order of toxicity.

Carcinogenicity Listing(s) (NTP, IARC, OSHA): None

Toxicity Data: No specific information available for product in purchased form. Individual component information is listed below.

Components:

Cellulose: LC₅₀ (rats, inhalation) = 5,800 mg/m³/4 hours

Skin Corrosion/Irritation: Data is not available. **Serious**

Eye Damage/Irritation: Data is not available.

Respiratory or Skin Sensitization: Data is not available.

Aspiration Hazard: Not applicable.

Target Organs: Eyes and respiratory system.

12. Ecological Information

Environmental Fate: Cellulose fiber slowly biodegrades in water (half life range 1mo – 1 yr in freshwater and coastal seawater). Cellulose fiber persists in arid soil (landfills).

Environmental Toxicity: Not available.

13. Disposal Considerations

Waste Disposal Method: Recycling centers are available in nearly every major and most small cities within the US and Canada that can take waste at no charge. If not recycled, and disposed of or discarded in its purchased form, incineration or dry land disposal is acceptable in most jurisdictions. Follow all applicable federal, state, provincial and local regulations. It is the user's responsibility to determine proper disposal methods.

14. Transport Information

Mode: (Air, Land, water) Not regulated as a hazardous material by the U.S. Department of Transportation. Not listed as a hazardous material in Canadian Transportation of Dangerous Goods (TDG) regulations. Not listed as a hazardous material for IATA, and IMDG. Not listed as dangerous goods by the European Agreement concerning the international carriage of dangerous goods by road (ADR).

14. Transport Information Cont'd)

Proper Shipping Name:	Not applicable
Hazard Class:	Not applicable
UN/NA ID Number:	Not applicable
Packing Group:	Not applicable
DOT labels required:	Not applicable

15. Regulatory Information

TSCA: All ingredients of this product are either listed on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

CERCLA: This product does not contain ingredients which are subject to the reporting requirements of CERCLA.

DSL: Cellulose is listed on the Canadian Domestic Substance List.

European REACH: Cellulose is exempted from registration due to being listed in Annex IV of the REACH regulation.

ENCS: Cellulose is not listed or is exempt from the Japanese Existing and New Chemical Substances List as regulated by the Ministry of International Trade and Industry.

OSHA: This product, as shipped, is not regulated as a OSHA hazardous chemical, however, cellulose dust is a regulated hazard under the OSHA Hazard Communication Standard [29 CFR 1910.1200] when it becomes mechanically processed and airborne.

SARA 313 Information: This product does not contain any chemical ingredient (s) with known CAS numbers that exceed the *de minimis* reporting levels established by SARA Title III, section 313 and 40 CFR section 372.

SARA 311/312 Hazard Category: This product has been reviewed according the EPA "Hazard Categories: promulgated under SARA Title III, Sections 311 and 312 and is considered, under applicable definitions, to meet the following categories:

An immediate (acute) health hazard	No
A delayed (chronic) health hazard	No
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

WHMIS Classification: Not considered a controlled product.

16. Additional Information

Disclaimer:

The information and data herein are believed to be accurate and have been compiled by Independence Corrugated from external sources believed to be reliable. Freedom Corrugated provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose and use in compliance with all applicable laws and standards. Freedom Corrugated will not be liable for claims relating to any party's use of or reliance on information and data contained herein.

Definition of Common Terms:

ACGIH	= American Conference of Governmental Industrial Hygienists
C	= Ceiling Limit
CAS#	= Chemical Abstracts System Number
CERCLA	= Comprehensive Environmental Response, Compensation, and Liability Act
DOT	= U. S. Department of Transportation
DSL	= Domestic Substance List
EC50	= Effective concentration that inhibits the endpoint to 50% of control population
ENCS	= Japanese Existing and New Chemical Substances List
EPA	= U.S. Environmental Protection Agency
HMIS	= Canada-Hazardous Materials Identification System

IARC	= International Agency for Research on Cancer
IATA	= International Air Transport Association
IMDG	= International Maritime Dangerous Goods
LC50	= Concentration in Air Resulting in Death To 50% of Experimental Animals
LCLo	= Lowest Concentration in Air Resulting in Death
LD50	= Administered Dose Resulting in Death to 50% of Experimental Animals
LDLo	= Lowest Dose Resulting in Death
LEL	= Lower Explosive Limit
LFL	= Lower Flammable Limit
MSHA	= Mine Safety and Health Administration
NIOSH	= National Institute for Occupational Safety and Health
NFPA	= National Fire Protection Association
NPRI	= Canada-National Pollution Release Inventory
NTP	= National Toxicology Program
OSHA	= Occupational Safety and Health Administration
PEL	= Permissible Exposure Limit
PNOR	= Particulate Not Otherwise Regulated
PNOS	= Particulate Not Otherwise Specified
RCRA	= Resource Conservation and Recovery Act
STEL	= Short-Term Exposure Limit (15 minutes)
STP	= Standard Temperature and Pressure
TCLo	= Lowest Concentration in Air Resulting in a Toxic Effect
TDG	= Canada-Transportation of Dangerous Goods
TDLo	= Lowest Dose Resulting In a Toxic Effect
TLV®	= Threshold Limit Value
TSCA	= Toxic Substance Control Act
TWA	= Time-Weighted Average (8 hours)
UFL	= Upper Flammable Limit
WHMIS	= Canada-Workplace Hazardous Materials Information System
UFL	= Upper Flammable Limit
WHMIS	= Workplace Hazardous Materials Information System



Cellulose Containerboard

WARNING

**May Form Combustible Dust Concentrations in Air if
Small Particles Are Formed During Processing or
Handling**

Keep away from all ignition sources including heat,
sparks and flame.

Prevent dust accumulations to minimize explosion hazard.

Technical Information

Ethafoam[®] 220 FR / FR-AS

Flame Retardant / Anti-Static Polyethylene Foam

Physical Properties*	Test Method	Value
Density (lb/ft ³)	ASTM D3575-08 Suffix W Method B	2.2
Compression Strength (psi) @ 10% / 25% / 50%	ASTM D3575-08 Suffix D	8 10 18
Compression Set (%)	ASTM D3575-08 Suffix B	< 20
Compression Creep (%) @ 2.5 psi (1000 hours)	ASTM D3575-08 Suffix BB	< 10
Tensile Strength (psi)	ASTM D3575-08 Suffix T	31
Tear Resistance (lb/in)	ASTM D3575-08 Suffix G	10
Cell Size (mm)	ASTM D3576 Modified	1.5
Water Absorption (lb/ft ²)	ASTM D3575-08 Suffix L	< 0.3
Thermal Conductivity (k-value) (BTU·In / Hr·Ft ² - °F)	ASTM C518	0.43
Thermal Resistance (R-value) (HR·FT2 - °F / BTU)	ASTM C518	2.3
Static Decay (sec.) (Antistatic grade)	EIA STD 541 Appendix F	< 2
Surface Resistance (ohms/ sq.) (Antistatic grade)	ESD-S11.11-1993	1.0 x 10 ⁹ – 1.0 x 10 ¹³
Fire Test Response Characteristic - vertical 12 sec. burn test	14 CFR Part 25.853 (a)	Pass
Flame Spread Index	ASTM E162	≤ 125**
Optical Density	ASTM E662	≤ 400**

*The data presented for this product is for unfabricated Sealed Air Corporation Ethafoam[®] product. While values shown are typical of this product, they should not be construed as specification limits.

**Shall Not Exceed



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RoHS



Pregis LLC

The brightest ideas in packaging.™

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May 21, 2019

Kimberly Weagraff
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EUROPEAN UNION REGULATORY RESTRICTIONS on "DANGEROUS" and/or "HAZARDOUS SUBSTANCES"

We are pleased to respond to your recent inquiry, regarding Pregis products' status with respect to various European Union regulatory restrictions and prohibitions against the formulary use of certain "environmentally hazardous substances." Information provided herein is intended by Pregis to:

Aid your selection of Pregis products in compliance with your customers' attendant specifications / restrictions. Substantiate your company's signed statements / representations of selected Pregis products' compliance with your customers' specified restrictions and prohibitions.

Such restrictions and prohibitions include, for example, the following European Parliamentary Directives:

- 76/769/EC: "Restrictions on the Marketing and Use of Dangerous Substances"
- 94/62/EC: "Packaging and Waste Directive"
- 2002/95/EC: "Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" (ROHS Directive)
- 2015/65/EU ROHS3
- 2002/96/EC: "Waste Electrical and Electronic Equipment" (WEEE Directive)
- 2003/11/EC: "Restrictions on the Marketing and Use of Certain Dangerous Substances and Preparations (pentabromodiphenyl ether, octabromodiphenyl ether)"

We understand your company's interest pertains to Pregis protective packaging products, including Astro-Cell® polyethylene air cushion bubble (including EZ™ Bubble-Out™ Bags), Astro-Foam® polyethylene foam including bags, PolyPlank®, Corner Keeper™, AirKraft® and Hefty Express® Shipping Mailers, Microfoam® polypropylene foam, ChamberPak™, Intellipak, Quantum® and/or AirSpeed® products. Anti-static (pink) and "natural" versions of Pregis aforementioned products, and those formulated with colors other than reds and yellows (discussed herein), may be expected to fully comply with the EU Directives referenced above.

With respect to "Packaging and Waste Directive" restrictions against certain "heavy metals" - including Cadmium and Cadmium compounds, Hexavalent Chromium and compounds thereof, Lead and Lead compounds, Mercury and Mercury compounds - Pregis offers its following assurance, based upon information provided by our suppliers:

All packaging and packaging components, manufactured in the United States by Pregis comply with the several United States' enacted provisions of the Coalition of Northeast Governors ("CONEG") legislative model for the reduction of toxics in packaging. Pregis manufacturing practices prohibit the intentional introduction of cadmium(Cd), hexavalent chromium(Cr ⁺⁶), lead (Pb), or mercury (Hg) into our products' formulations. Further, the cumulative total of all such metals' incidental concentrations does not exceed 100 parts per million (ppm).

European Commission Directives - including Article 11; Part 111; Reg. 7,8, and 9 of the Packaging and Waste Directive 94/62/EC, and the U.K. Packaging (Essential Requirements) Regulations 1998 - impose the same restrictions on concentrations of the same heavy metals in packaging materials.

SUBSTANCES RESTRICTED / PROHIBITED FROM USE IN ELECTRONIC PRODUCTS
Page 2 of 2

With respect to restrictions on the formulary use of certain "Ozone-Depleting Chemicals:"

You may be assured that Pregis uses no chlorofluorocarbon (CFC) foaming agents in any of its aforementioned products. We can further assure you that Pregis products are not "manufactured with," and do not "contain," "ozone-depleting chemicals" designated by legislation effective as of the date of this certification, including Title VI of the U.S. Clean Air Act. Our polyethylene products are not, therefore, subject to "Protection of Stratospheric Ozone" labeling requirements promulgated by U.S. EPA in 40 CFR, Part 82.

Pregis flame-retardant / fire-resistant products may be formulated to contain the following substances in concentrations exceeding 0.1 percent-by-weight:

Antimony and Antimony Compounds
Octabromodiphenyl ether (Octa-BDE),
Pentabromodiphenyl ether (Penta-BDE),
Polybrominated Biphenyls (PBB),
Polybrominated Diphenyl Ethers (PBDE)
Penta-, Octa-, Deca-Brominated Flame Retardants

However, the FR bubble product produced for your film-laminated bubble product is not formulated to contain such substances. Further, Pregis NON-flame-retardant / NON-flame-resistant products are not formulated to contain such substances.

Pregis pigmented / colored products may be formulated to contain:

Azo-Based Colorants / Dyes (typically red, yellow)
Copper and Copper Compounds: Copper-Based Colorants (typically blue, green)

Pregis natural (i.e., un-colored; clear or white) products, and products formulated with colors other than those mentioned above, are not formulated to contain Azo or Copper-based colorants.

The following substances are not employed in Pregis products' formulations. Insofar as they are not intentionally introduced into our products' formulations, they are not, therefore, expected to be present in our products' finished composition. Pregis products are not routinely analyzed for the presence of these substances:

Arsenic and Arsenic Compounds	Organophosphate Compounds
Asbestos	ortho-Phthalates
Beryllium and Beryllium Compounds	Palladium and Palladium Compounds
Bismuth and Bismuth Compounds	Polychlorinated Biphenyls (PCB)
Chlorinated Paraffins	Polychlorinated Naphthalenes
Ethylene Glycol Ethers	Polyvinyl Chloride (PVC)
Gold and Gold Compounds	Radioactive Substances
Lead, Magnesium, Mercury	Selenium and Selenium Compounds
Nickel and Nickel Compounds	Short Chain Chlorinated Paraffins
Organic Tin Compounds (Di-/Tri- Butyl/Phenyl)	Silver and Silver Compounds

Thank you for your support of Pregis products.

Sincerely yours,



George Allen
Regulatory Affairs



REACH

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May 21, 2019

Kimberly Weagraff
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Substances of Very High Concern (SVHC) on Registry of Intentions for Annex XV Dossiers

We are pleased to respond to your recent inquiry regarding for the presence of SVHC that appear on the Registry of Intentions for Annex XV Dossiers with regard to the EU REACH regulation.

Based upon information provided by our suppliers Pregis product formularies are not known to contain compounds in concentrations above 0.1% (w/w) as listed on the Candidate List of Substances of Very High Concern for Authorization as of the current revision of January 15th 2019. A complete list of chemicals may be found at the following website:

<http://echa.europa.eu/candidate-list-table>

I trust you will find this to be adequately responsive to your need for information on this subject. You are welcome to contact us if you need any additional information or further assistance.

Thank you for your support of Pregis products.

Sincerely yours,

A handwritten signature in cursive script that reads "G. T. Allen".

George Allen
Regulatory Affairs



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **POLYETHYLENE FOAM PRODUCTS, Natural plus Colors**

Astro-Barrier™, Astro-Foam®, Furniture Guard® Roll / Sheet products;
PolyPlank® LAM, PolyPlank® MDL, PolyPlank® PLK, PolyPlank® SFT;
Proflex® Profiles, Corner Keeper™, Edge Foam®

This MSDS pertains only to natural and/or pigmented products formulated without anti-static and/or fire retardant additives, adhesive components, or other specialty additives.

SUPPLIER: **Pregis Innovative Packaging, Inc.**
1650 Lake Cook Road, Suite 400
Deerfield, IL 60015

CONTACTS: Please contact your Pregis products sales associate or customer service associate: (1-800-834-9441).

2. COMPOSITION / HAZARDOUS INGREDIENTS INFORMATION

Some specific chemical identities being withheld as trade secrets, but will be revealed to health professionals per 29CFR1910.1200 (c).

<u>CAS NUMBER</u>	<u>SUBSTANCE</u>	<u>PERCENT BY WEIGHT</u>
	Polyethylene resin (1-Butene polymer with ethene, tris-nonylphenyl phosphite, polyethylene homopolymer, crystalline silica)	≥ 84 %
25087-34-7	Ethene/Butene Copolymer	
9002-88-4	Polyethylene Homopolymer	
75-28-5	Hydrocarbon Foaming Agents	≤ 5 %
10-97-8		
14807-96-6	Talc (Magnesium silicate)	≤ 4 %
67701-33-1	Foam Processing Aid, Monodiglycerides	≤ 2 %
Various	Organic and/or inorganic colorants, which may include carbon black pigment (which is thoroughly bound to the polymer matrix)	≤ 5 %

OSHA REGULATORY STATUS: This material is not classified as hazardous under OSHA regulations. However, this MSDS contains valuable information essential to the safe handling and use of the product. This MSDS should be retained and available for employees and other users of this product.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Odorless plastic foam in a variety of colors. Can burn in fire, releasing toxic vapors, gases, and fumes.

POTENTIAL HEALTH EFFECTS

EYE:	May cause slight irritation.
SKIN:	No hazard in normal industrial use.
INGESTION:	Ingestion unlikely, material physiologically inert.
INHALATION:	Inhalation at ambient temperatures unlikely except for dust from grinding, slitting, die cutting, etc. At elevated temperatures, fumes may cause irritation.
EFFECTS OF OVEREXPOSURE:	Inhalation of fumes from heated plastic may cause irritation of respiratory tract, chest discomfort, and/or dizziness. In rare cases, contact with sensitive individuals' skin may result in irritation or reddening of skin.
CARCINOGENICITY LISTINGS:	Crystalline silica: Classified 1 (Proven for human) by IARC, Classified 2 (Reasonably anticipated) by NTP

POTENTIAL ENVIRONMENTAL EFFECTS: The material should pose no significant hazard to the environment. See Section 12, "Ecological Information."

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: **POLYETHYLENE FOAM PRODUCTS, Natural plus Colors**

Page 2 of 5

4. FIRST AID MEASURES

EYE CONTACT: Flush eye with water for 15 minutes. Get medical attention if irritation persists.
SKIN CONTACT: Wash contaminated skin with mild soap and water. Individuals experiencing skin sensitivity should obtain medical advice.
INHALATION: If respiratory irritation occurs, remove affected personnel to fresh air. Obtain medical attention if irritation persists or is severe.
INGESTION: Not considered a likely route of entry. Swallowing small quantities will not cause harm.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES: Not established for product as a whole
EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water, foam
FIRE & EXPLOSION HAZARDS: Polyethylene is combustible. Pregis's polyethylene foam also contains some residual flammable blowing agent that might accumulate in confined spaces to produce concentrations in the explosive range. Processes such as grinding could produce fine dust and flammable vapors. Both could be potential explosion hazards.
FIREFIGHTING EQUIPMENT: Wear full bunker gear including a positive pressure self-contained breathing apparatus.
HAZARDOUS DECOMPOSITION PRODUCTS: Temperatures above 480°F could cause product degradation potentially producing toxic vapors.

6. ACCIDENTAL RELEASE MEASURES

No special measures are necessary beyond good general housekeeping.

7. HANDLING AND STORAGE

HANDLING: Further processing of polyethylene foam products with any fabrication processes such as slitting, grinding, skiving, sawing, routing, or die cutting that cuts cells can release residual flammable blowing agent. A flammable concentration could accumulate, if air is not properly circulated. All sources of ignition should be prevented in areas where foam is fabricated. Humidifiers or ionized air blowers can be used to reduce the possibility of static spark.
Grinding equipment and any bins or hoppers should be purged with a positive airflow to dissipate any build up of blowing agent gases. Monitoring systems should be in place to insure that a concentration of blowing agent does not accumulate during shutdowns or malfunctions.
For hot wire cutting or thermal welding airflow should be provided to adequately disperse potential blowing agent build up.

STORAGE: Always store polyethylene foam products in well-ventilated areas. Always keep foam products away from excessive heat and any sources of ignition such as sparks or flame. Never store foam in confined areas or sealed-off compartments. Foam scrap or fabricated parts for disposal should be stored and shipped in ventilated containers.

OTHER PRECAUTIONS: Whenever possible ship polyethylene foam products in ventilated trailers. When opening doors and unloading foam shipments, extinguish all possible sources of ignition such as matches, cigarettes, sparks, and lighters. Allow air circulation into the trailer for ten minutes after opening trailer doors before unloading foam. Control any vapor or dust emissions that may be generated by further processing of product.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: **POLYETHYLENE FOAM PRODUCTS, Natural plus Colors**

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION:	Local ventilation should be provided, if product is further processed producing dust or fumes. General ventilation may also be used, but local ventilation is usually preferable. See also recommendation for ventilation in Section 7 to control potential release of flammable blowing agent.
RESPIRATORY PROTECTION:	Not normally required. If product is being further processed producing dust or fumes, local ventilation should be provided. Respiratory protection is normally only to be used as a temporary measure until proper ventilation can be installed.
EYE PROTECTION:	Not normally required, but is recommended if product is further processed.
SKIN PROTECTION:	Not normally required. Wearing gloves is consistent with good industrial safety / hygiene practice.
GENERAL HYGIENE CONSIDERATIONS:	There are no known health hazards associated with this material when used as recommended. The following general hygiene considerations are recognized as common, good industrial hygiene practices: • Wash hands after use and before eating, • Avoid breathing dust, and • Wear safety glasses.
EXPOSURE GUIDELINES:	Polyethylene foam: Not established for product as a whole. Polyethylene: Nuisance dust TWA 10 mg/m ³ total (ACGIH), Nuisance dust TWA 3 mg/m ³ respirable (ACGIH), Nuisance dust PEL 15 mg/m ³ total (OSHA), Nuisance dust PEL 5 mg/m ³ respirable (OSHA) Crystalline Silica: 0.05 mg/m ³ TWA (OSHA, ACGIH) Isobutane: 800 ppm TWA (NIOSH) n-Butane: 800 ppm TWA (NIOSH, ACGIH) Hydrous magnesium silicate: 2 mg/m ³ TWA (NIOSH, ACGIH), 20 mppcf (millions of particles per cubic foot of air) PEL (OSHA), IDLH 1000 mg/m ³ (NIOSH)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Plastic foam in a variety of colors.
ODOR:	None
PHYSICAL STATE:	Solid
pH:	Not applicable
VAPOR PRESSURE:	Not applicable
VAPOR DENSITY:	Not applicable
BOILING POINT:	Not applicable
MELTING POINT:	220°F
SOFTENING POINT:	170°F
WATER SOLUBILITY:	Insoluble
SPECIFIC GRAVITY:	Not established for product as a whole. For polyethylene resin (major component) 0.87-1.05
AUTO-IGNITION TEMPERATURE:	Not established for product as a whole. For polyethylene resin (major component) 343°C (650°F)

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.):	Stable
CONDITIONS TO AVOID:	Extreme heat
INCOMPATIBILITY:	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS:	Temperatures above 480°F could cause product degradation potentially producing toxic vapors including carbon monoxide, olefinic, and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes, and/or alcohols.
HAZARDOUS POLYMERIZATION:	Will not occur

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: **POLYETHYLENE FOAM PRODUCTS, Natural plus Colors**

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11. TOXICOLOGICAL INFORMATION

TOXICITY: Not established for product as a whole. Polyethylene resin (main ingredient) not considered to be toxic to humans or animals. Rats inhaling polyethylene dust developed mild inflammatory changes in the lungs. Prolonged inhalation of thermal degradation products from polyethylene caused neurological effects in rats. Animal studies showed no adverse health effects on the digestive system when fed up to 20% polyethylene. No skin effects are expected from polymer contact. Subchronic (50 to 90 day) feeding studies conducted on rats, dogs, and swine showed no effects from dietary levels of 1 to 20% powdered and shredded polyethylene. IARC has listed polyethylene as a Group 3 substance (Not classifiable as to carcinogenicity to humans).

IRRITATION: Skin contact not normally a problem. Inhalation at ambient temperatures unlikely except for dust from grinding. At elevated temperatures, such as produced by hot cutting, fumes may cause respiratory or eye irritation.

CARCINOGENIC COMPONENTS: Crystalline silica (< 0.1%): IARC-classified 1 (Proven for human); NTP-Classified 2 (Reasonably anticipated) Target organ is the lung; California Proposition 65-listed carcinogen (respirable). Release of these materials may occur in small quantities during processing of the product, but is not expected to present a hazard.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Not established for product as a whole. For polyethylene resin (main ingredient) ecotoxicity is expected to be low and bioaccumulation is not expected to occur.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: If the material as supplied becomes a waste, dispose of in accordance with local, state, and federal laws and regulations. Contact your local or state environmental agency for specific rules.

RCRA INFORMATION: If the material as supplied becomes a waste, it does not meet the definition of a hazardous waste as defined under RCRA (40 CFR 261).

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:	Not regulated
INTERNATIONAL SEA TRANSPORT / I.M.O.; I.M.D.G.:	Not regulated
INTERNATIONAL AIR TRANSPORT / I.A.T.A.; I.C.A.O.:	Not regulated
EUROPEAN ROAD & RAIL / A.D.R.; R.I.D.	Not regulated
CANADIAN TRANSPORT OF DANGEROUS GOODS:	Not regulated

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: **POLYETHYLENE FOAM PRODUCTS, Natural plus Colors**

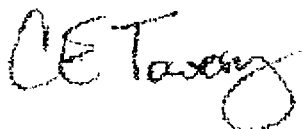
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15. REGULATORY INFORMATION

CERCLA 102A / 103:	None
TSCA 12(b):	Nonylphenol (a trivial component of polyethylene)
SARA III, Sec. 302	None
CALIFORNIA PROPOSITION 65:	No labeling required.
COALITION OF NORTHEAST GOVERNORS ("CONEG") legislative model for the reduction of toxics in packaging and CALIFORNIA TOXICS IN PACKAGING PREVENTION ACT	All shipping mailer packaging and packaging components, manufactured in the United States by Pregis Innovative Packaging, Inc., comply with the several United States' enacted provisions of the Coalition of Northeast Governors ("CONEG") legislative model for the reduction of toxics in packaging and the California Toxics in Packaging Prevention Act. Pregis Innovative Packaging, Inc.'s manufacturing practices prohibit the intentional introduction of cadmium(Cd), hexavalent chromium(Cr ⁺⁶), lead (Pb), or mercury (Hg) into its products' formulations. Further, the cumulative total of all such metals' incidental concentrations does not exceed 100 parts per million (ppm).

16. OTHER INFORMATION

None.



Claude Towery
Manager, Regulatory Affairs

Information provided by sources external to our company and set forth herein is offered in good faith as accurate, but without guarantee. Safety precautions contained herein cannot anticipate all individual and unique situations. Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are, therefore, assumed by the user, and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product. Nothing herein is intended as recommendation for uses which infringe valid patents or as extension of license under valid patents. Appropriate warnings and safe handling procedures should be provided to users.

PREPARED BY: Product Stewardship Office
c/o Hexacomb Corporation
1175 Central Avenue
University Park, IL 60466

DATE PREPARED: August 10, 1996
DATE REVALIDATED: October 24, 2006
DATE PRINTED: December 30, 2007

5122119 - Albany

2 lb
foam

Wm. T. Burnett & Co.
FOAM DIVISION

SAFETY DATA SHEET

Section I – Product Identification

IDENTITY (As used on Label and List) S82C Polyurethane Foam		<i>Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i>	
Manufacturer's Name Wm. T. Burnett & Co.		Emergency Telephone Number (410) 799-1788	
Address (Number, Street, City, State and Zip Code) 2112 Montevideo Road		Telephone Number for Information Same as above	
Jessup, MD. 20794		Date Prepared 8/15/2018	Date Printed 8/16/2018

Section II – Hazard Identification

Route(s) of Entry:	Inhalation? No	Skin? Yes	Ingestion? Yes
Health Hazards (Acute and Chronic) Foam material is essentially non-toxic and non-allergenic in normal usage. It is recommended that oral ingestion of this product be avoided. Vapors may be produced if product is exposed to high temperatures (130°C/265°F) or open flames, which may irritate the eyes, nasal passages or lungs. Dust generated by processing may be irritating.			

Section III – Composition

Hazardous Composition (Specific Chemical Identity; Common Name(s)) None
Note: Polyurethane foam is a fully cross-linked reaction product of polyhydroxy polyol, isocyanates, catalysts, surfactants, colorants and water. Additional additives may be present, depending on the product, such as fire retardants, germicides and antistatic agents. This product is not hazardous according to the criteria established in the OSHA Hazard Communication Standard.

Section IV – First Aid Measures

Emergency and First Aid Procedures: Under normal usage, exposure will not require treatment. If exposed to fumes or smoke from thermal decomposition, remove to fresh air. Administer artificial respiration if not breathing. Flush eyes with water for 15 minutes in case of contact. If skin irritation develops, wash thoroughly with soap and water. If ingested, call a physician. Cases requiring first aid should seek medical attention as soon as possible. Provide a copy of the MSDS to the Physician.
--

Section V – Fire and Explosion Hazard Data

Flash Point (ASTM D-1929)	800-850°F	Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media Water, Carbon Dioxide and Dry Powder.				
Special Fire Fighting Procedures Use self-contained breathing equipment.				
Unusual Fire and Explosion Hazards If ignited, foam can produce rapid flame spread, intense heat, and dense black smoke and toxic gases. Material can melt into a burning liquid that can drip and flow.				

Section VI – Accidental Release Measures

Steps to Be Taken in Case Material is Released or Spilled Sweep up or collect spilled material. In case of a water spill, the product floats and can be retrieved. Recover smaller particles by filtration. Collected for disposal or recycling.
--

Section VII – Storage and Handling

Precautions to Be Taken in Handling and Storing Foam material is flammable by definition in OSHA 29 CFR (Hazard Communication) Part 1910.1200, when tested by method described in 16 CFR 1500.44.
Other Precautions Foam material should be stored and handled away from open flames or abnormally high temperatures.

Section VIII – Exposure Controls and Personal Protection

Respiratory Protection (Specify Type)

Respiratory protection not normally required. If warranted, respirators and usage must conform to 29CFR1910.134 requirements.

Ventilation

Local Exhaust

Required if foam material is processed under melting or flaming conditions.

Mechanical (General)

Yes

Protective Gloves

Must meet 29CFR1910.138 for processes involved.

Eye Protection

Must meet 29CFR1910.133 for processes involved.

Other Protective Clothing or Equipment

Other protective clothing or equipment should be appropriate to the processes involved.

Work/Hygienic Practices

Observe good industrial hygiene practices.

Section IX – Physical/Chemical Characteristics

Boiling Point

N/A

Density

50-20 lbs./ft³

Vapor Pressure

N/A

Melting Point

N/A

Vapor Density

N/A

Evaporation Rate

N/A

Solubility in Water

Insoluble

Appearance and Odor

Foam material is flexible, resilient solid, essentially odorless.

Section X – Stability and Reactivity

Stability

Stable

Conditions to Avoid

High temperatures and open flames without proper ventilation. Strong acids, alkalis, and oxidizing agents will deteriorate foam material properties.

Section XI – Toxicological Information

None

Section XII – Ecological Information

None

Section XIII – Disposal Considerations

Dispose in compliance with federal, state, and local regulations. Scrap may be recycled under some circumstances.

Section XIV – Transport Information

This material is not hazardous as defined by 49 CFR 172.101 (US DOT).

Section XV – Regulatory Information

Restriction of Hazardous Substances European Union Directive [ROHS] – (2002/95/EC):

Meets the Requirements through December 2011 revision of SVHC

Registration, Evaluation and Authorization of Chemical Substances [REACH] – (EC 1907/2006):

Compliant with REACH as of this date.

California Proposition 65:

This foam does not contain chemicals that are known to the State of California to cause cancer or birth defects or reproductive harm.

Section XVI – Other Information

Revision Date: November 16, 2015



Safety Data Sheet

Section 1: Product and Company Identification

Product Name(s):	Flexible Polyurethane Foam
Synonyms:	Flexible Slabstock Polyurethane, Polyether Polyurethane Foams, FPF, PU
Product Use:	Formed polyurethane products for but not limited to Furniture, Bedding, Packaging, Carpet Cushion, and Rebond Material.
Chemical Family:	Cellular Polyurethane Polymer
Supplier:	VPC Group Inc. 150 Toro Road Downsview, Ont, M3J-2A9
Emergency Phone:	416-630-6633

Section 2: Hazards Identification

GHS Globally Harmonized System	NFPA (USA)	WHIMIS - Classification (Canada)	Transport Symbol	Personal Protective Equipment
None Required		Not Controlled	Not Regulated for Transportation	

Product Overview	Flexible Polyurethane foam, FPF, is solid open-cellular polymer not know to contain any hazardous materials. FPF dusts may cause irritation to eyes and respiratory tract. Dusts in air may pose a health hazard and an explosive hazard. The foam is a combustible solid, once ignited will burn with rapid flame spread producing intense heat, dense smoke and toxic fumes (primarily oxides of carbon and nitrogen). Processors and users of FPF are encouraged to perform their own analysis to assure this product is handled safely using suitable protective equipment.
Primary Health Hazard :	The primary health hazards posed by this product are thought to be due to exposure to dusts.

Potential Health Effects:	Acute: see section 8 for exposure controls
Relevant Route(s) of Exposure:	Inhalation, Ingestion, Skin Contact, Eye Contact
Inhalation:	Dusts may cause irritation to the respiratory tract. When heated to decomposition, fumes are toxic.
Ingestion:	There is no evidence that PU foam is toxic in case of ingestion
Skin:	Rubbing may cause mechanical irritation. Skin absorption not expected to be significant under normal use of product.
Eye:	No health effects expected with normal use of this product. During processing operations, air born particulates may cause irritation as a foreign object in the eye. Extreme heating of this products may release irritating vapors or fume
Medical Conditions Aggravated by Exposure:	Not available
Interaction with Other Chemicals:	Not applicable
Potential Environmental Effects:	Not applicable

Section 3: Composition / Information on Ingredients

Polyurethane Foams are; Poly-addition product of isocyanates, polyether polyols and water, controlled by catalysts, stabilizers and other additives, resulting in cellular polyurethane foam.

INGREDIENT	% WT
Polyurethane foam	100

Hazardous Ingredients: No Hazardous ingredients, This product is classified as an article and non-hazardous according to the criteria established in the OSHA Hazard Communication Standard
Polyurethane foams are also identified as industrial polymers, not considered to be hazardous nor as mixtures of dangerous substances.

Section 4: First Aid Measures

Inhalation:	If symptoms persist, remove victim to fresh air. If victim has stopped breathing, administer artificial respiration and seek immediate medical attention.
Eye Contact:	May cause mechanical irritation. Open eyelids and hold back while flushing with water for at least 15 minutes. Seek medical attention.
Skin Contact:	No special treatment required. May cause mechanical irritation. Vacuum or brush dusts from skin. Flush with lukewarm water. Seek medical attention if symptoms persist.
Ingestion:	Does not apply
Notes to Physicians	Treat symptomatically

5 Fire Fighting Measures:

General Fire Hazards:	Product will ignite upon exposure to an ignition source causing intense heat and dense smoke with toxic gases (primarily oxides of carbon and nitrogen). Burning foam may melt into pools or droplets of burning liquid. Foam may smolder and reignite. Foam dusts can produce potentially explosive atmospheres. Treat this material as a combustible solid.
Extinguishing Media:	Water, foam, dry chemical, carbon dioxide.
Fire Fighting Equipment/Instructions:	Fire fighters should wear NIOSH approved full-face positive pressure self contained breathing apparatus and impervious protective clothing including boots.
Warning;	Polyurethane foams like other organic materials once ignited will burn rapidly, releasing a great deal of heat, generate toxic gases and consume oxygen at a high rate. In an enclosed space the resulting deficiency of oxygen will present a danger of suffocation to the occupants. The toxic gases and smoke generated by the burning foam if inhaled in sufficient quantities can be incapacitating or fatal to human beings.

Section 6: Accidental Release Measures:

Containment Procedures:	Keep unauthorized personnel away. Ventilate closed spaces before entering them. Do not touch damaged or spilled material unless wearing appropriate protective equipment. : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. No special response required. Sweep or vacuum up. Pick-up or sweep large pieces of material for recycling or disposal. Material not collected for recycling is to be disposed as a non-hazardous waste according to local, provincial, state, and federal regulations.
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Section 7: Handling and Storage:

Handling:	Special protective equipment and clothing is not necessary when handling foam, it does not irritate the skin, eyes or respiratory system, except in processes where dust is produced. Where there is adequate general ventilation, no special precautions are necessary for most handling and cutting operations. Local exhaust ventilation is necessary for operations where dust is produced from cutting, buffing or crumbing. Operations or where fumes are produced in flame laminating, or hot wire cutting Protective goggles should be worn for processes which generate dust, appropriate respiratory masks are recommended. No specific measures are needed for fully cured FPF foam. Gloves should be used when handling fresh foams. Do not allow smoking or foam scrap or dust to accumulate in the workplace or in equipment.
Storage:	Storage areas should be protected by a sprinkler system meeting insurance, NFPA and/or local codes. Avoid elevated storage temperatures. Keep away from open flames, burning cigarettes, space heaters, naked lights, exposed electrical wiring, or other ignition sources. Urethane foam products are combustible and will burn rapidly, consume oxygen and produce toxic gases (primarily oxides of carbon and nitrogen). Maintain good housekeeping practices. Do not allow foam scrap or dust to accumulate in the workplace or in equipment.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines for foam	ppm	mg/m³
OSHA PEL-TWA:	None established for any of the components	
OSHA PEL STEL :	None established for any of the components	
OSHA PEL CEILING:	None established for any of the components	
ACGIH TLV-TWA:	None established for any of the components	
ACGIH TLV STEL:	None established for any of the components	
ACGIH TLV CEILING:	None established for any of the components	

Exposure Guidelines for foam dust

Ingredient	ACGIH-TLV 8hr TWA (mg/m ³)	US OSHA PEL 8 hr TWA (mg/m ³)	Ontario (Canada) TWAEV (mg/m ³)
Inhalable Dust	Particles (insoluble or poorly soluble) Not otherwise Specified (PNOS) 3 (respirable) 10 (inhalable)	Particles (insoluble or poorly soluble) Not otherwise Regulated (PNOR) 5 (respirable) 15 (inhalable)	Particles (insoluble or poorly soluble) Not otherwise Specified (PNOS) 3 (respirable) 10 (inhalable)

Exposure Controls

Engineering Controls:	Provide appropriate general or local mechanical ventilation to control dust to concentrations below the exposure guidelines
Personal Protection:	Follow the directions for personal protective equipment for the worksite
Eye/Face Protection:	During operations where dust, fumes, or vapor are generated, use appropriate eye and face protection
Skin Protection:	When handling fresh foam (sticky) foam wear appropriate clothing and gloves
Respiratory Protection:	When dust, fumes, or vapor concentrations in air exceed the occupational exposure guidelines, wear appropriate protective clothing, gloves and respiratory protection. If needed, use appropriate NIOSH-approved respirator based on identity and concentration of air contaminant.
Ingestion;	There are no known health hazards associated with this material when used as designed. It is recommended employees wash thoroughly after handling the material. Wash before and after eating, smoking, drinking or using restroom facilities. Avoid breathing dusts.
General Hygiene Measures:	Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product. Wash hands after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Contaminated work clothing should not be allowed out of the workplace.

Section 9: Physical and Chemical Properties:

Physical state / Appearance;	Solid Uniform Cellular material with elastic properties
Color, and Odor:	Color varies according to manufacturer's choice, negligible odor
Bulk Density (lb/cuft)	0.5 - 40
Specific Gravity	Not applicable
Stability and reactivity	The product is stable at temperatures between - 40°C and + 100°C
Solubility in water	Insoluble
pH:	Not applicable
Flash Point:	Not applicable
Flammability Limits in Air:	Not Available
Vapor Pressure:	Not applicable
Auto-ignition point (ASTM D 1929)	Greater than > 370°C Greater than > 698°F
Thermal Degradation Point	Greater than > 180°C Greater than > 356°F
Evaporation Rate	Not Available
Melting Point:	Not applicable
Freezing Point	Not applicable

Section 10: Stability and Reactivity:

Chemical Stability:	Stable under ordinary conditions of use and storage.
Conditions to Avoid:	Avoid open flames, high temperatures, strong oxidizers such as (acid and bases), Fine dusts which may pose dust explosion hazard.
Incompatible Materials:	Oxidizing agents. Strong acids or bases will degrade the foam. Exposure to UV light may alter color.
Hazardous Decomposition Products:	Combustion of the foam will generate intense heat and a dense black smoke with irritating and toxic fumes, containing products such as carbon black, carbon monoxide, carbon dioxide, nitrogen oxides, aldehydes, organic acids, gaseous hydrocarbons, hydrogen cyanide all being generated in various concentrations depending on the combustion conditions
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.



Section 11: Toxicological Information:

ACUTE TOXICITY: No data available
ROUTES OF EXPOSURE: Inhalation, eye, contact

HEALTH HAZARDS: **Inhalation:** Foam dust – Coarse dust can cause mechanical irritation of the upper respiratory tract when concentrations are above the applicable occupational exposure limit. Airborne dust is evaluated as a nuisance dust. Vapors – Irritating vapors (decomposition products) may be produced if product is exposed to temperatures above 356 F, 180°C. If ignited, foam may decompose and emit toxic gases and respiratory irritants. **Eye:** Foam dust – Coarse dust can cause mechanical irritation to the eyes. If exposed, avoid rubbing eyes. Vapors – Irritating vapors (decomposition products) may be produced if product is exposed to temperatures above 356 F, 180°C.

SKIN CORROSION / IRRITATION: No data available
SERIOUS EYE DAMAGE / EYE IRRITATION: No data

Chronic Toxicity Data

Carcinogenicity:	This mixture does not contain any component that is considered a carcinogen or potential carcinogen under the definition specified by OSHA 29 CFR 1910.1200(d)(4). This mixture does not contain any component that is considered a human carcinogen by IARC, ACGIH or NTP.
Irritation:	During processing, airborne particulates may cause temporary irritation as a foreign object in the eye. Heating of the product may release irritating vapours
Corrosivity:	Not applicable
Sensitization:	Not applicable
Neurological Effects:	Not applicable
Genetic Effects:	Not applicable
Reproductive Effects:	Not applicable
Developmental Effects:	Not applicable
Target Organ Effects:	Not applicable

Section 12: Ecological Information:

Ecotoxicity:	Not applicable
Persistence/Degradability:	Not applicable
Bioaccumulation/Accumulation:	Not applicable
Mobility:	Not applicable
Other Hazardous Effects	None

Section 13: Disposal Considerations:

Waste Disposal Method:	This product may be able to be recycled. Shred and/or bale scrap foam for recycling.
Canada:	Disposal of any non recyclable material must be in accordance with local, provincial, and federal laws and regulations
USA:	Disposal of any non recyclable material must be in accordance with local, state, and federal laws and regulations

Section 14: Transport Information:

Canadian Transportation of Dangerous Goods (TDG):	Not Regulated
US Hazardous Materials Regulation (DOT 49CFR):	Not Regulated
Water Transportation IMDG:	Not Regulated
Marine Pollutants:	Not Applicable
ICAO/IATA: Air Transportation	Not Regulated



Section 15: Regulatory Information:

Canada

Canada	Not Regulated
WHMIS Classification:	Not Regulated
DSL Status: New substance Notification Regulations	Not Regulated
NPRI Substances: National Pollutant Release Inventory	Not Regulated

USA US Federal Regulations:

TSCA Status:	Polyurethane foam meets the definition of an Article 19 CFR Section 12.120(a); 40 CFR
SARA Title III	None of this product's components are listed under SARA Section 302 (TPO), 304 (RO), 313, RCRA, CERCLA or CAA (112(r) TO).
Clean Air Act:	The product does not contain any Class 1 or Class 2 Ozone depleting substances.
Clean Water Act:	This product is not listed as a Hazardous Substance under the CWA. This product does not contain any chemicals listed as priority of toxic pollutants under the CWA.

Section 16: Other Information:

Revision Date:	June 24,2016
Revision Summary:	Rewrite and formatting of entire SDS (to GHS requirements)
Manufacturer Contact:	VPC Group Inc. 150 Toro Road Downsview, Ont, Canada M3J 2A9 416-630-6633
Manufacturer Contact:	Vitafoam Products Canada Ltd 150 Toro Road Downsview, Ont, Canada M3J 2A9 416-630-6633
Manufacturer Contact:	Vitafoam Products Canada Ltd (Calgary Division) 3220 56 th Avenue SE Calgary, Alberta Canada T2C 0B1 403- 236-2702
Manufacturer Contact:	Valle Foam Ltd 4 West Drive Brampton, ON, Canada L6T 2H7 905-453-8054
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Date of Preparation: June 28, 2016
Prepared By: A. Sinicropi
Reviewed By: F.Donato---