

Material Safety Data Sheet

Date of issue: 15/06/09

1 – Product and Company Identification

- **Material identification:** CORECELL™ FOAM
- **Product name:** A, K, M, P, S, T series
- **Application of the product:** Structural rigid foam
- **Supplier/Manufacturer:** Gurit (Canada) Inc
175, rue Péladeau
Magog (Québec) J1X 5G9
Canada Tel: 1 819 847-2182
- **For additional information :** Health, Safety and Environment department:
Email: christian.moreau@gurit.com

2 – Hazards Identification

- **Emergency overview:** Solid combustible material.
- **Hazardous status:** This material is classified hazardous under OSHA 29 CFR 1910.1200 and under the Canadian Controlled Products Regulations when processing operations on the product is considered normal conditions of use.
- **Potential health effects:**
 - Eyes: Dust from machining operations on the product may cause irritation. Organic vapors released when machining or processing the product may cause eye irritation.
 - Skin: Mechanical abrasion may cause minor irritation.
 - Inhalation: Dust from machining operations may cause irritation to upper respiratory tract. Vapors released when machining or processing the product may cause respiratory irritation. During intensive operations, vapors released may cause effect to the cardiovascular system and to the central nervous system.
 - Ingestion: Product is not expected to present harmful effects if swallowed.

3 – Composition/Information on Ingredients

Ingredient name	CAS number	% Concentration	DL50/CL50
Acetone	67-64-1	1 – 5 %	See section 11
Hexane	110-54-3	0.5 – 1.5 %	See section 11
Hexane isomers	-	0.5 – 1.5 %	See section 11

- Corecell™ is a structural polymer product of reacted monomers having some of the characteristics of SAN copolymer CAS # 9003-54-7. All other components are bound within the polymer structure. Trace levels of residual acrylonitrile monomers are expected to be released when processing the product. Residual acrylonitrile is present at levels below the reporting guideline of the Hazard Communication Standard or the WHIMS.
- This product contains a halogenated flame retardant system.

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4 – First Aid Measures

- **Eye contact:** If dust or particles become lodged in eyes, rinse immediately with plenty of water. If symptoms persist, consult a physician.
- **Skin contact:** No need for specific measures.
- **Ingestion:** In case of persistent symptoms, consult a physician.
- **Inhalation:** If affected by dust or vapors, remove individual to fresh air. If condition persists, obtain medical attention.

5 – Fire-Fighting Measures

- **Suitable extinguishing media:** Water, foam, carbon dioxide or dry chemical fire extinguishers.
- **Not suitable extinguishing media:** None
- **Special exposure hazards:** Formation of toxic gases will occur during thermal decomposition or in case of fire. Hazardous combustion products include Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen cyanide and Hydrogen bromide. Dense smoke will be generated when burning.
- **Protective equipment:** Wear fully protective suit with self contained breathing apparatus (SCBA) with a face-piece operated in positive pressure mode. Reduce direct exposure to smoke and fumes.

6 – Accidental Release Measures

- **Personal precautions:** No special instructions
- **Environmental precautions:** No special instructions
- **Measures for cleaning up:** Sweep up spilled material.

7 – Handling and Storage

- **Handling:** Wear appropriate personal protection when handling.
 Machining operations which can produce dust should be properly fitted to a dust collection system. Prevent formation of dust that could create explosive atmospheres.
 Provide adequate general ventilation and local exhaust ventilation during machining and processing operations to control airborne contaminant exposure.
 Processing the product through heated equipment or tools could enhance the release of organic vapors. Accumulation of static electricity charges may appear during machining operations or handling of the material. Ensure all machining equipment are bonded and grounded to reduce static energy build-up. Static electricity might give an unpleasant sensation but is not a possible source of ignition.
- **Storage:** Protect from heat and open flames. This product is a combustible material and should be stored according to the national or local Fire Code.
 Trace levels of organic vapors may be released for a while after machining operations. Ensure good mechanical ventilation for storage of large quantities of the processed product.

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8 – Exposure Controls / Personal Protection

• Exposure limits :

Ingredient name	CAS#	OSHA (PEL)	ACGIH
Acetone	67-64-1	750 ppm (TWA)	500 ppm (TWA)
Hexane	110-54-3	500 ppm (TWA)	50 ppm (TLV)
Hexane isomers	Mixture	-	500 ppm (TLV)
Particulates Not otherwise Regulated	-	15 mg/m ³ (TWA)	10 mg/m ³ (TLV)

Note: Dust from machining operations has non-respirable fraction properties.

• **Engineering measures:** Provide general and local exhaust ventilation to control airborne contaminant.

• Personal protection equipments:

Eye protection: Wear safety glasses/goggles
 Skin protection: Wear general purpose gloves and protective work clothing.
 Respiratory protection: Wear an approved NIOSH respirator with organic vapour cartridge if vapors are not adequately controlled. Breathing protection recommended if excessive dust is generated.

General measures: Handle product with good industrial and safety practices. Organic vapors anticipated to be released during machining and processing operations are expected to be below exposure guidelines.

9 – Physical and Chemical Properties

- **Physical state:** Solid
- **Color:** Yellow
- **Odor:** Nearly odorless
- **Flash point:** Not applicable
- **Melting point:** Softening point 70°C - 120°C (158°F - 248°F)
- **Decomposition temperature:** >180°C (356°F)
- **Boiling point:** Not applicable
- **Ignition temperature:** Product will not spontaneously ignite
- **Relative density:** 0.05-0.4 g/cm³
- **Vapor pressure:** Not applicable
- **Evaporation rate:** Not applicable
- **Solubility in water:** Insoluble

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10 – Stability and Reactivity

- **Stability and reactivity:** This product is stable.
- **Conditions to avoid:** Do not overheat to avoid thermal decomposition.
- **Dangerous reaction:** No dangerous reactions known.
- **Incompatibility with other substances:** Strong oxidizers, strong acids and bases will degrade the product.
- **Hazardous decomposition products:** Decomposition products include but are not limited to: Residual monomers, Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen cyanide and Hydrogen bromide.

11 – Toxicological Information

• Toxicological data:

Substance	DL50 (Oral Rat)	CL50 (Inhalation Rat)
Acetone	5800 mg/kg	21 000 ppm (8h)
Hexane	28 710 mg/kg	48 000 ppm (4h)
Hexane isomers	-	-

- **Acute toxicity:** Dust and vapour may cause irritation to eyes.
Abrasive contact may cause irritation to skin.
Dust and vapour may cause irritation to respiratory tract.
- **Sensitization:** No sensitizing effects known.
- **Chronic toxicity:** No data available

Additional information: When used and handled according to specifications, the product is not expected to cause any adverse effects. It is recommended that pregnant or breastfeeding women should not be working in areas where this product is processed.

12 – Ecological Information

- **Ecotoxicity data:** No data available
- **Persistence and biodegradability:** No data available
- **Mobility:** Foam particles will float on the water.

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13 – Disposal Consideration

- **Waste disposal:** Product is stable and not hazardous. Disposal must comply with applicable Federal, State and local regulations. Waste generator should review appropriate regulations.

14 – Transport Information

- **Regulatory status**
(UN; IMDG/IATA; DOT/TDG): Not regulated for transport

15 – Regulatory Information

- **Regulatory status:**
This product is subject to classification only when machining or processing the product. Finished pre-cut frame kits are exempted from classification.
- **TSCA (USA) & DSL (CAN):**
All substances are listed
- **WHIMS:**
Class D2A; D2B
- **California Prop. 65:**
This product contains trace quantities of a substance known to the State of California to cause cancer : Acrylonitrile.

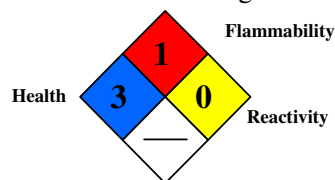
HMIS-rating

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARDS	0

Hazard rating

0-Minimal
1-Slight
2-Moderate
3-Serious
4-Extreme

NFPA-rating



16 – Other Information

- **References:** ANSI Z400.1, MSDS Standard, 2004;
29CFR 1910.1200 OSHA Hazard Communication Standard;
Controlled products regulations (DORS/88-66) Canada.
- **Notice to the reader:**
To the best of our knowledge, the information contained herein is accurate at the date of its publication. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Data issued: May 4, 2022
Valid period: 12 months

Bulletin

We, CHIMEI CORPORATION, to the best of our knowledge hereby certify that the resins listed below (hereinafter referred as "products") as directly manufactured by us

POLYLAC® ABS (J01)

PA-704LRP, PA-705, PA-707, PA-709, PA-709H, PA-709K, PA-709P, PA-709S, PA-716, PA-717C, PA-718, PA-726, PA-726M, PA-727, PA-737, PA-737 A03, PA-746, PA-746H, PA-746M, PA-746Y, PA-747, PA-747F, PA-747H, PA-747R, PA-747S, PA-747S A01, PA-749, PA-749S, PA-756, PA-756S, PA-756H, PA-757, PA-757 A01, PA-757 AB, PA-757F, PA-757G J08, PA-757H, PA-757N, PA-757K, PA-777B, PA-777C, PA-777D, PA-777E, PA-77NB, PA-797, PA-797S

(J01) - The suffix may be used to denote the black color grade manufactured from Chi Mei Corp.

(A01 & A03) - The suffix may be used to denote the white color grade manufactured from Chi Mei Corp.

POLYLAC® MABS

PA-703TRP, PA-758, PA-758R, LS-L230

KIBISAN® SAN

PN-106, PN-107, PN-117, PN-117C, PN-117H, PN-127, PN-127H, PN-137H, PN-106 L150 FG, PN-107 L125 FG, PN-117 L200 FG, PN-127 L150 FG

POLYREX® PS

PG-22, PG-33, PG-80, PG-80N, PG-383, PG-383D, PH-55Y, PH-60, PH-88, PH-88S, PH-888G, PH-888H, PH-88SF

ACRYREX® PMMA

CM-203, CM-205, CM-205G, CM-205N, CM-207, CM-207G, CM-211, CM-211G

ACRYSTEX® SMMA

PM-500, PM-500G, PM-600, PM-700G

KIBITON® TPE

PB-511, PB-575, PB-585, PB-587, PB-5300, PB-5301, PB-5302, PB-5308, PB-5502

KIBITON® Q-resin

PB-5630, PB-5900, PB-5903, PB-5906, PB-5910, PB-5925

KIBIPOL® LBR/SSBR/HBR

PR-040, PR-040C, PR-040G, PR-040S, PR-050, PR-060S, PR-245, PR-255, PR-303, PR-1205

ACRYPOLY®

CM-205B, CM-205X, PM-500X, LM-700X

The above statement is based on our current level of knowledge and covers the above products directly manufactured and supplied by CHIMEI CORPORATION at the date of issue. CHIMEI CORPORATION makes no warranties, whether express or implied, and assumes no liability in connection with any use of above information. Notwithstanding the foregoing, CHIMEI CORPORATION shall in no event be held obligated or liable for any claims due to or arising from (i) any customer provided, consigned, materials and/or parts, which are incorporated or adopted in the products; (ii) any combination of the products with material not provided or authorized by our company; (iii) any modifications to the products which are made or directed by customer; (iv) our compliance with the specifications, instructions, and/or designs provided by customer; (v) any anti-trust, unfair competition and/or other unlawful actions effected by customer; or (vi) any defects, infringement, breach and/or violation which are arising out of customer's faults or otherwise not solely and directly attributable to CHIMEI CORPORATION. In no event will CHIMEI CORPORATION be liable for any indirect, special, exemplary, punitive, or consequential damages (including lost profits) of any nature whatsoever whether arising out of the purchase, shipment, unloading, handling, or use of any product or otherwise.

KIBILITE®

DC-552F, DC-552G, DC-553F, DC-603F, DM-000B, DM-551M,
DM-553B, DM-601M, DM-601R, DS-551A, DS-553A, DS-553C,
DS-553H, DS-601S, DS-601Y, DS-603A, DS-603C, DS-653A,
DS-653C, DS-743B, DS-753B, DS-903A, DS-903E, DS-903H,
DS-943A, DS-943B, DS-943G, DS-943H, DS-943I, DS-963E,
DS-963G

KIBILAC®

PW-957, PW-978B, PW-997, PW-997G, PW-997S

conforms to the requirement that no chemicals as following are added.

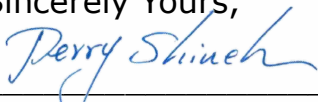
1. Halogen (F, Br, I) and its compounds
2. Halogen (Cl)
3. PBDEs (Polybrominated Diphenyl Ethers)
4. PBBs (Polybrominated Biphenyls)
5. Ozone Depleting Chemicals (CFCs & HCFCs)
6. Chlorinated Paraffin (C10-C13)
7. Polyvinyl Chloride (PVC)
8. Mercury (Hg) and its compounds
9. Lead (Pb) and its compounds
10. Cadmium (Cd) and its compounds
11. Chromium (Cr) and its compounds
12. Arsenic (As) and its compounds
13. Antimony (Sb) and its compounds
14. Selenium (Se) and its compounds
15. Barium (Ba) and its compounds
16. Beryllium (Be) and its compounds
17. Bismuth (Bi) and its compounds
18. Organic tin compounds (TBT, TPT, DOT, DBT)
19. Polychlorinated Biphenyls (PCBs) and Terphenyls (PCTs) and Naphtalenes (PCNs)
20. Poly naphthalenes
21. Azo colorants (according to REACH-ANNEX-XVII-APPENDIX 8)
22. Asbestos
23. Phthalates
24. APEO: Including Alkylphenol(AP), Octylphenol(OP), Nonylphenol(NP), Octylphenol ethoxylates(OPE), Nonylphenol ethoxylates(NPE)
25. 2-(2'-Hydroxy-3',5'-di-tert-butylphenyl)benzotriazole
26. PFOA and its compounds, PFOS and its compounds
27. Perchlorate
28. Hexachlorobenzene
29. Mirex
40. Specified amine compounds
41. Benzene
42. Benzenamine, *N*-phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST)
43. Polyamide
44. PVDC (polyvinylidene chloride)
45. ESBO (Expoxidized soybean oil)
46. Formamide
47. Hexabromocyclododecane (HBCDD)
48. Red phosphorus
49. Aniline · formaldehyde polycondensate
50. Fluorescent powder
51. 4,4'-Sulfonyldiphenol (BPS)
52. Tris(1-chloro-2-propyl)phosphate (TCPP)
53. Tris(1,3-dichloro-2-propyl)phosphate (TDCPP)
54. Tris (2,3-dibromopropyl) phosphate
55. Tris (aziridiny) phosphin oxide
56. Tri-*o*-cresyl phosphate
57. Tris (2-chloroethyl) phosphate (TCEP)
58. Perfluorohexane-1-sulphonic acid and its salts (PFHxS)
59. Diisononyl phthalate (DINP)
60. Di-isodecyl phthalate (DIDP)
61. Di-*n*-octyl phthalate (DnOP)
62. Diethyl phthalate (DEP)
63. Dimethyl phthalate (DMP)
64. Cobalt
65. Mica
66. Graphite

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- | | |
|-----------------------------------|---|
| 27. Bisphenol A | 67. Bis (2-ethylhexyl) phthalate (DEHP) |
| 28. Formaldehyde | 68. Butyl benzyl phthalate (BBP) |
| 29. Dimethylfumarate (DMF) | 69. Dibutyl phthalate (DBP) |
| 30. Triclosan | 70. Diisobutyl phthalate (DIBP) |
| 31. Nickel | 71. PIP (3:1) (phenol, isopropylated phosphate 3:1) |
| 32. REACH- Candidate List of SVHC | 72. DecaBDE (decabromodiphenyl ether) |
| 33. Radioactive Substances | 73. 2,4,6-TTBP (2,4,6-Tris(tert-butyl)phenol) |
| 34. Natural Latex | 74. HCBd (hexachlorobutadiene) |
| 35. Dioxins and furans | 75. PCTP (pentachlorothiophenol) |
| 36. Primary aromatic amines (PAA) | |

With regard to composition of above grades of products, the aforesaid products comply with the Directives of RoHS 2011/65/EU and its amendment (EU) 2015/863, TCO'07, Blue Angel and SONY Standard (SS-00259)

Sincerely Yours,



Perry D. B. Shiueh

Vice President of R&D Division

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Low Residual Monomer SAN KIBISAN® PN-107 L125FG

Product Description: High clarity

Properties	ISO Test Method	Test Condition	Unit	PN-107 L125FG
Melt Flow Index	1133	220°C×10KG	ml/10 min	58
Mass Density	1183	23 °C	g/cm ³	1.06
Tensile Strength	527	50 mm/min, yield	MPa	65
		50 mm/min, break	MPa	65
Tensile Elongation	527	50 mm/min	%	4
Flexural Strength	178	2 mm/min	MPa	89
Flexural Modulus		2 mm/min	GPa	2.6
Izod Impact Strength	180/1A	23°C, Notched	KJ/m ²	2
		-30°C, Notched	KJ/m ²	–
Charpy Impact Strength	179	23°C, Notched	KJ/m ²	2
		Charpy -30°C, Notched	KJ/m ²	–
Vicat Softening Temp.	306	50°C/hr;1KG	°C	104
		50°C/hr;5KG	°C	101
Heat Distortion Temp.	75/A	1.8MPa, unannealed	°C	88
		1.8MPa, annealed	°C	99
Coefficient of Linear Thermal Expansion	11359	-	-	3.6~3.8*10 ⁻⁵
Flammability	-	UL-94	-	1.5mm HB
Mold Shrinkage	294-4	-	%	0.2~0.7
Symbol	1043	-	-	>SAN<

July 22, 2021

Notes : These are typical properties only and are not to be construed as specifications. Users should confirm results by their own test

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