

Shelter Materials Group
Vinyl Building Products Group

CertainTeed Corporation
Governor Lane Blvd
PO Box 290
Williamsport MD 21795
301 223-7900
301 223-6249 (FAX)

CertainTeed 

FILE COPY

August 7, 1992

Shashi Patel
Labor Safety Officer
Iowa Division of Labor Services
1000 East Grand
Des Moines, Iowa 50319

RE: US EPA EPCRA Compliance Inspection, Docket #VII-92-875E
Wolverine Technologies, Grinnell Iowa

Dear Mr. Patel;

On June 24, 1992 Mr. Doug F. Elders of US EPA's Region VII office (Kansas City, KS) conducted an "Emergency Planning and Community Right to Know" compliance inspection of our Wolverine Technologies vinyl extrusion facility located in Grinnell, Iowa (CertainTeed is the parent company of Wolverine Technologies).

The one and only issue raised by Mr. Elders was whether we were required to have an MSDS pursuant to OSHA regulations (copy of Mr. Elders's letter attached) for "B F Goodrich's Geon Resin 27" [polyvinyl chloride resin] (copy of MSDS attached); and if this were the case then we failed to report this substance under SARA Section 311 & 312 rules (and which rules relate to 40 CFR Part 370 Subpart B ..370.20(a)).

CertainTeed Corporation is a sophisticated and knowledgeable user and producer of polyvinyl chloride resins, as we own and operate our own PVC polymer manufacturing facility in Lake Charles, LA. It is quite obvious to us that the MSDS provided by B F Goodrich is a gross exaggeration of the actual properties and hazards associated with PVC resins. For this reason we exercised our option, as provided in 29 CFR 1910.1200(d) "Employers are not required to evaluate chemicals unless they choose not to rely on the evaluation performed by the chemical manufacturer or importer for the chemical to satisfy this requirement", and we have rather relied on the information which we know to be true and accurate, and that which our own Corporate Industrial Hygiene staff has generated (copy of CT MSDS attached for PVC resin). Please know that CertainTeed's position in matters such as this is that we reflect and communicate accurate safety and health information about the chemicals and materials we use for both the benefit of our employee and for public protection.

CTL031775

Mr. Shashi Patel
8/7/92 Page 2

To resolve this issue to the satisfaction of Mr. Elders, we have been asked to contact your agency and ask that you make a formal statement regarding our obligation to "prepare or have available a material safety data sheet (or MSDS) for a hazardous chemical under the Occupational Safety & Health Act of 1970 and regulations promulgated under that Act" [specific quote from 40 CFR Part 370.20 (a) but emphasis added by writer]. To assist you in making such a determination, I would like to call your attention to the CertainTeed MSDS for PVC Polymer (resins), and in particular the first statement in Section 1, "PVC is not considered a hazardous substance under current Department of Labor definitions."

Upon review of the BF Goodrich MSDS, I can totally understand why Mr. Elders raised this question. I do want to point out that insofar as the information relating to Vinyl Chloride Monomer listed on page 2 of the BF Goodrich MSDS, the amount of VCM listed in their data sheet mathematically relates to 0.00085% (vs. ppm), and therefore it, and the corresponding warnings are inappropriate (eg; 29 CFR 1910.1200 (5)(iii) <0.1% mixture component). Insofar as the information which CT provides in Section 4 of our MSDS and which relates to conditions aggravated by thermal decomposition, please note that thermal decomposition does not occur during our normal extrusion (manufacturing) process.

Should you find it necessary, please be advised that our Ms. Janis Reynolds, Director, Industrial Hygiene is available to provide additional information or more specific data, or to discuss with you information relating to actual employee exposure monitoring, should you find this information useful in making your determination. Ms. Reynolds may be reached at 215-341-7713.

I look forward to hearing from you in this most important matter.

Sincerely,



Kenneth L. Everhart, Jr.
Manager, Safety & Environmental Affairs
Vinyl Building Products Group, &
Shelter Materials Group

cc: J. Oleson
J. Reynolds
D. Elder - EPA

CTL031776

-2-

Within thirty (30) days of your receipt of this letter, please undertake the following actions and supply this office with the following documentation:

- 1) if you disagree with the assessment of your responsibility to prepare or maintain an MSDS for the polymers referenced above pursuant to OSHA, request from OSHA a determination whether your company is required to prepare or maintain an MSDS pursuant to the Hazard Communication Standard, 40 C.F.R. §1910.1200, for the forms of polymers which your company stores and processes; and
- 2) if your company is required to prepare or maintain an MSDS for the polymers, provide EPCRA §§311 and 312 notifications and forms to the MERC, LEPC and local fire department in accordance with the regulation at 40 C.F.R. §370.20(b). Provide copies to me at the above address. Otherwise provide a copy of OSHA's written determination that you are not required to prepare or maintain an MSDS for the polymers.

Please be aware that this letter does not limit EPA from taking further action on this matter. Any such action depends upon your timely and complete response to this matter.

If you have any question concerning this letter or your responsibilities under EPCRA, contact me at (913) 551-7020.

Sincerely,

Doug F. Elders

Doug F. Elders
Environmental Engineer
Toxic Substances Control Section

CTL031777

May 6, 1992

MR. KEN EVERHART
CERTAINTTEED CORPORATION
{DIR. MGR. HEALTH SAFETY}
GOVENOR LANE BLVD.
WILLIAMSPORT, MD 21795

BF Goodrich
Geon Vinyl Division

Dear Customer:

Re: Newly Written or Updated Material Safety Data Sheet (MSDS) for:

<u>External Name</u>	<u>Product No.</u>	<u>Issue</u>
GEON RESIN 27	000270000000	010

The enclosed MSDS must be used for the above product(s). In the event that the MSDS updates a previously issued MSDS, all old MSDS's should be discarded to avoid confusion.

Copies of the MSDS can be made on any standard copier, however, please insure that records are kept of all recipients of the MSDS. In the event that this MSDS is updated, all previous recipients must be sent the updated version of the MSDS. Your company will receive all updated MSDS's for this product which will require the forwarding of copies to persons shown in your records.

In addition, Title III of the EPA Superfund Amendment and Reauthorization Act of 1986, Section 313, Subpart C requires manufacturers or distributors to provide a notice to their customers if any product sold contains a Section 313 listed chemical. This information is provided in the hazardous ingredients section of the MSDS and is indicated by an appropriate footnote. If you are unsure if this law requires you to report on annual emissions of specified toxic chemicals and chemical categories, contact the EPA Emergency Planning and Community Right-To-Know Hotline: (800) 535-0202 or (202) 479-2449 (in Washington, DC or Alaska). Please note that if you repackage or otherwise redistribute this product to industrial customers, a notice should be sent to those customers.

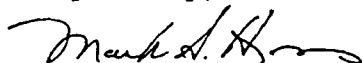
Any questions regarding this MSDS should be directed to:

Mark Hross
Cleveland, Ohio
(216) 447-7601

or

Audré McKinnon
Waterloo, Ontario
(519) 888-4318

Very truly,



Mark Hross
Manager - Product Stewardship
(216) 447-7601

Customer Number: 15480708008

MSDS RECORD
RECEIVED 5/92
ENTERED 5/27/92
SENT TO DHMH 5/27/92
REPLACED ON _____
☐ INITIAL ☒ UPDATE
☒ CURRENT ☐ NOT CURRENT

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00045 w

<u>Material</u>	<u>C.A.S. Number</u>	<u>Amount in Product</u>	<u>ACGIH TLV-TWA</u>	<u>OSHA PEL-TWA</u>
Vinyl Chloride Monomer ^{1,2,3,4,5,6}	75-01-4	<8.5 ppm	5 ppm	1 ppm (5 ppm TWA for any 15 minute period)

Vinyl Chloride Monomer LD₅₀ (rat, inhalation) - 18 pph/15M
Vinyl Chloride Monomer LC₅₀ - N.E.

N.A. - Not Applicable

N.E. - Not Established

Vinyl chloride monomer is shown as an OSHA cancer suspect agent (29 CFR 1910.1017), an American Conference of Governmental Industrial Hygienists (ACGIH) confirmed human carcinogen, and a National Toxicology Program (NTP) and an International Agency for Research on Cancer (IARC) human carcinogen.

Legislative Footnotes

¹ Ingredient listed on SARA Section 313 List of Toxic Chemicals

² Ingredient listed on the *Pennsylvania Hazardous Substances List*

³ Ingredient listed on the California listing of *Chemicals Known to the State to Cause Cancer or Reproductive Toxicity*

⁴ Ingredient listed on the *Massachusetts Substance List*

⁵ *Workplace Hazardous Materials Information System* ingredient found on the Ingredient Disclosure List - Canada

⁶ Ingredient listed on the *New Jersey Right to Know Hazardous Substance List*

Notes: *TLV-TWA* -- Threshold Limit Value - Time Weighted Average for concentration of the chemical substance in the ambient workplace air. American Conference of Governmental Industrial Hygienists (ACGIH).

OSHA PEL -- OSHA Permissible Exposure Limit, 8-hour TWA. 29 CFR 1910.1000 1989.

clude phosgene, acrolein or vinyl chloride.

Explosive Characteristics: Geon® resin dust has a very low tendency to explode. The minimum ignition energy for explosion of Geon® resin dust is very much higher than that of natural materials such as corn starch and flour and also exceeds those of other plastic materials. However, as with any powder materials, care should be taken in addressing ignition sources in working and handling areas.

SECTION V - Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, carbon dioxide and small amounts of benzene and aromatic and aliphatic hydrocarbons.

CAUTION! Prolonged heating (approximately 30 minutes or more) of the product above 200°C (392°F) or short term heating at 250°C (482°F) may result in rapid evolution of hydrogen chloride.

Incompatibility (Materials to Avoid): Avoid contact with strong oxidizers. Also, avoid contact with acetal or acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.

SECTION VI - Health Hazard Data

Threshold Limit Value: Not Established

Primary Routes of Exposure: Inhalation of powder or process emissions

Effects of Overexposure:

Acute: No adverse health effects are anticipated from the product at ambient temperature. However, at process temperatures, the product can emit fumes and vapors which may cause irritation of the eyes and respiratory tract. Any effects will depend upon processing technique and temperature, volume processed and the effectiveness of exhaust ventilation provided for the process. Effects of chronic exposure to off-gases at processing temperatures have not been fully evaluated.

Chronic: Vinyl resin has little effect on the lungs and is not known to cause any disease when

SECTION VIII - Special Protection Information

Ventilation: Effective exhaust ventilation should always be provided to draw fumes or vapors away from workers to prevent routine inhalation. Ventilation should be adequate to maintain the ambient workplace atmosphere below the legislated levels listed in Section II. Compounding, hot melt processing (e.g., extruding and molding), cutting or sawing, machining, regrinding, thermoforming, heat welding and other processing or post-processing operations involving heat sufficient to result in polymer break down should be examined to insure adequate ventilation.

Respiratory Protection: Wear a NIOSH/MSHA-approved respirator specific for chemicals listed in Section II and VI, as applicable, when concentrations exceed those limits listed. Comply with OSHA 1910.134 (29 CFR). Where large amounts of dust may occur, wear a NIOSH/MSHA-approved respirator for nuisance dust.

Protective Equipment: Safety glasses or chemical goggles. Wear protective gloves when handling resin bags or hot material during processing.

SECTION IX - Special Precautions

Material Handling: As with any product, should dusting occur from material handling, sources of ignition, such as static discharge, should be addressed by the user to prevent the ignition and sudden release of energy from suspended, finely divided particulates. If dusting occurs, utilize a NIOSH/MSHA-approved respirator for nuisance dust. Remove product from walkways and floors to prevent slippery footing.

Normal Melt Processing: Virtually all thermoplastic materials will emit fumes and/or vapors when heated to processing temperatures. The concentration and composition of these vapors will depend upon variables such as the specific compound formulation and processing method and temperature. Always use the product under well-ventilated conditions and avoid breathing process vapors. For personal hygiene, wash thoroughly after handling resin, especially before eating, smoking or using toilet facilities. Do not store or consume food in processing areas. Do not use processing equipment to heat food.

Cleanup: Cleanup following normal melt processing should be performed under well-ventilated conditions. Compound based upon vinyl resin may be held at process temperatures for a short time without significant thermal degradation. However, it should be recognized that exposure to either elevated temperature or excessive heat history (time) will result in decomposition. (As a general rule, degradation begins to occur after about one hour at 177°C (350°F), about ten minutes at 204°C (400°F) and within five minutes at 232°C (450°F). Equipment should not be shut down for extended time periods with the product in it, or decomposition and possible corrosion of unprotected metal may result. If dies and screws are not to be cleaned manually, then compound should be purged from processing equipment prior to shutdown using special vinyl purge compound or a compatible thermoplastic such as general purpose ABS (do not use flame-retarded or halogen-containing grades for this purpose).

Storage: Sprinklered warehouse areas are recommended. The product by itself will not support

Shipping Information

IDENTIFICATION - DOMESTIC TRANSPORTATION

Proper Shipping Name (172.101(c)): N.A.

(Technical Names(s)) (172.203(k)): N.A.

Hazard Class (172.101(d)): N.A.

UN/NA# (172.101(e)): N.A.

Haz. Substance (171.8): N.A.

Inhalation Hazard (172.2a(b)): N.A.

Reportable Quantity: N.A.

PACKAGING (Part 173)

- Packaging Sections (172.101(g)) - Col. 5(a): N.A. Col.5(b): N.A.
- General Packaging Sections - General 173.24 Hazard Class: N.A.

DANGEROUS GOODS DETERMINATION (2.1) - INTERNATIONAL TRANSPORT

Proper Shipping Name (Col. B): N.A.

Class/Division (Col. C): N.A.

Subsidiary Risk (Co. D): N.A.

UN/ID# (Col. A): N.A.

U.S. Haz. Substance (US 1): N.A. Other/Inhalation Haz. (US 34): N.A.

Variations (1.8): States (Governments): N.A. Carrier (Table 1.8B): N.A.

PACKAGING

- Max. Qty. Per PKg.(Cols. H/J) - Passenger: N.A. Cargo: N.A.
- Packaging Instructions (Cols. G/I) - Passenger: N.A. Cargo: N.A.

MARKING

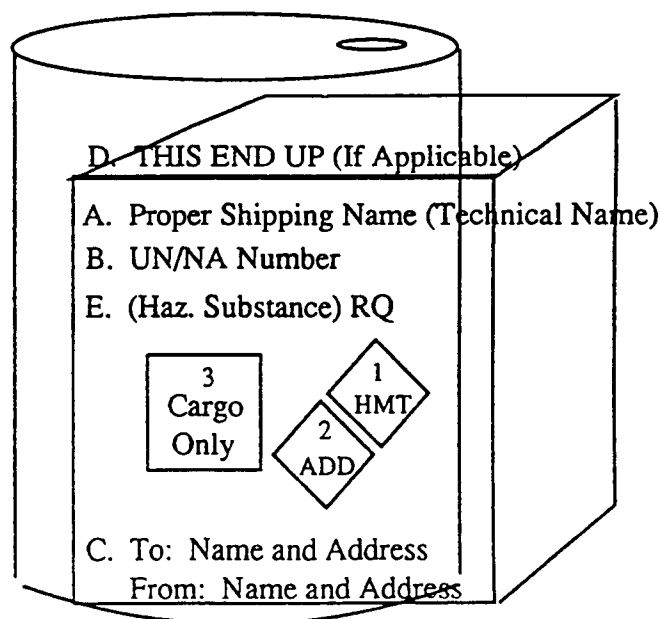
- A. Proper Shipping Name (172.301(a))
(Technical Name(s))(172.301(c))
- B. UN/NA Number (172.301(a))
- C. Name and Address (172.306(a))
- D. THIS END UP 9(172.312(a))
- E. Haz. Substance RQ (Name)(172.324)
 - ORM Designation (172.316(a))
 - Inhalation Hazard (172.301(a))

DOMESTIC LABELING

1. HMT LABELS (172.400)
2. Additional Hazard (172.402(a))

INTERNATIONAL LABELING

1. Primary Hazard
2. Subsidiary Risk (If Appropriate)
3. Cargo Aircraft (If Appropriate)



Material Safety Data Sheet

CertainTeed

CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19422
(215) 341-7000

(24 Hour Telephone

Date Prepared 6/7/90

Product Identification (Label Name) CertavinTM CT-1110 PVC Polymer

Chemical Name Ethene, Chlorohomopolymer

	Health	Fire	Reactivity
NFPA Rating	1	1	0
HMIS Rating	1*	1	0

CAS No. 9002-86-2

DEGREE OF HAZARD

0-Minimal (Insignificant)

1-Slight

2-Moderate

3-Serious (High)

4-Severe (Extreme)

*-Chronic Health Effect(s)

Common Name(s) Polyvinyl chloride; PVC;

Polyvinyl chloride resin

1. INGREDIENTS

Chemical Name (CAS No.)	Common Name	Exposure Limits	%
PVC is not considered a hazardous material under current Department of Labor definitions.		None Established	ca 100
PVC may contain trace amounts of the following materials:			
*Ethene, Chloro (CAS 75-01-4)	vinyl chloride (VCM)	OSHA PEL: 1 ppm ACGIH TLV: 5 ppm	trace
Ethene, Trichloro (CAS 79-01-6)	trichloroethylene	OSHA PEL: 100 ppm ACGIH TLV: 50 ppm	trace
These chemicals are both listed on California's Proposition 65 and on EPA, SARA, TITLE III Section 313 but not on Section 302.			
* IARC, NTP and OSHA carcinogen			

2. PHYSICAL DATA

Boiling Point N/A - solid	% Volatile By Volume N/A	Melt Point
Vapor Density (Air = 1) N/A - solid	% Solubility (H ₂ O) negligible	Specific Gravity 1.40
Vapor Pressure N/A - solid	Appearance powder, white	
Odor		CTL031783

3. FIRE AND EXPLOSION HAZARD DATA

Flash Point & Method About 391°C (735°F) Method: Not specified

Flammable Limits
LEL N/A UEL N/A

Extinguishing Media Water most effective. ABC dry chemical.

Special Fire Fighting Procedures Wear positive pressure, self-contained breathing apparatus (SCBA) when fighting a fire and during clean up immediately after a fire.

Unusual Fire and Explosion Hazard Combustion or thermal decomposition yields carbon dioxide, carbon monoxide, hydrogen chloride (gas) and small amounts of aromatic and aliphatic hydrocarbon. Vinyl resin is not considered to be a dust explosion risk. As a precaution it is prudent to employ standard safety measures used in handling finely divided organic powder.

4. HEALTH EFFECTS

Primary Routes of Entry Inhalation, ingestion

Carcinogens None IARC No NTP No OSHA No

Acute: No significant toxic hazard.

Chronic: No significant toxic hazard.

Conditions Aggravated By: Decomposition products may cause irritation to respiratory tract and aggravate bronchial asthma and other chronic obstructive respiratory diseases.

Dust Exposure: PVC resin is not known to cause any lung disease when dust exposure is minimized. Routine inhalation of any kind of dust should be avoided.

At processing temperatures the resin, stabilizers, lubricants, modifiers, etc., may emit irritating fumes and vapors including hydrogen chloride.

Special Note: PVC resin is not a cancer suspect agent. It is the trace amount of unreacted vinyl chloride monomer that must be controlled, not the PVC itself. Employee exposure to vinyl chloride, a carcinogen, is regulated by OSHA (29 CFR 1910.1017). The OSHA PEL is 1.0 ppm for an 8 hour time weighted average (TWA) or 5.0 ppm average for 15 minutes. The action level is 0.5 ppm for an 8 hour TWA. (See also Section 11.)

CTL031784

5. EMERGENCY AND FIRST AID PROCEDURES

Skin: Flush thoroughly with cool water for at least 5 minutes.

Eyes: Flush with water for at least 15 minutes. Get medical attention.

Inhalation: Remove to fresh air. Get medical attention.

Ingestion: Consult a physician. Treat as inert, granular material.

6. PHYSICAL HAZARDS

None

7. SPECIAL PROTECTION INFORMATION

Respiratory: Not normally required. Abnormal conditions during processing may cause decomposition. Wear NIOSH/MSHA approved self-contained breathing apparatus when removing decomposed materials.

If dusty conditions exist, wear NIOSH/MSHA approved nuisance dust respirator.

Gloves: When handling hot material during processing.

Eyes: Goggles for dust protection.

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8. REACTIVITY

Stable. Hazardous polymerization will not occur. Avoid excessive heat for prolonged periods. Avoid contact with acetal or acetyl copolymers and with amine containing materials during processing. At processing conditions these compounds are mutually destructive and involve rapid degradation even in trace amounts.

9. STORAGE INFORMATION

Store in cool, dry place (for product quality). Remove PVC resins from floors and walkways to prevent slipping.

Ground pneumatic transfer lines to avoid electrostatic accumulation hazard.

10. SPILL, LEAK, AND DISPOSAL INFORMATION

Vacuum or sweep into a closed container for reuse or disposal.

Waste Disposal Method

Dispose of wastes in a licensed landfill or by incinerating in accordance with federal, state and local regulations. Hydrogen chloride is generated by incineration. PVC resins are not defined as hazardous by current provisions of the Resource Conservation and Recovery Act (RCRA-40 CFR 261).

11. ADDITIONAL COMMENTS

Always use PVC compound under well-ventilated conditions and avoid continued or prolonged breathing of process vapors. Wash thoroughly after handling resin, especially before eating or smoking.

Warning on Resin Containers: When the further processing of PVC resin will be likely to result in employee exposure to VCM at or above the action level, the OSHA Regulation requires the label state:
"Polyvinyl chloride contains vinyl chloride. Vinyl chloride is a cancer suspect agent."

Acronyms used in this MSDS:

N/A: Not applicable
CAS No.: Chemical Abstracts Service Number
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
LEL: Lower explosive limit
UEL: Upper explosive limit
IARC: International Agency for Research on Cancer
NTP: National Toxicology Program
NIOSH: National Institute for Occupational Safety and Health
MSHA: Mine Safety and Health Administration
EPA: Environmental Protection Agency US
HMIS: Hazardous Material Identification System
NFPA: National Fire Protection Association
SARA: Superfund Amendments & Reauthorization Act
TITLE III: Emergency Planning & Community Right to Know Act
 Section 302 - Extremely Hazardous Substances
 Section 313 - Toxic Chemicals
ACGIH: American Conference of Governmental Industrial Hygienist
V: Threshold Limit Value
PPM: Parts Per Million

CTL031786

ENTER PLANT / SITE
OR FILE NAME:

ENVIRONMENTAL FIELD/FILE NOTES
(FOR INTERNAL USE ONLY)

ENTER
CONSECUTIVE
PAGE NUMBER

Don Petty - Labor Genius

Title III Coordinator

515 281 3606

Attended Doug earlier today

due to fact mtl heated my molded
palletized mtl

Might give off VCM

More than 1000's

Shashi determined was haz

515 281 5352

Suggested Conf call Shashi & he & I

☐ CONTINUED TO NEXT PAGE ?

☐ DRAWING ON REVERSE SIDE ?