

BF Goodrich

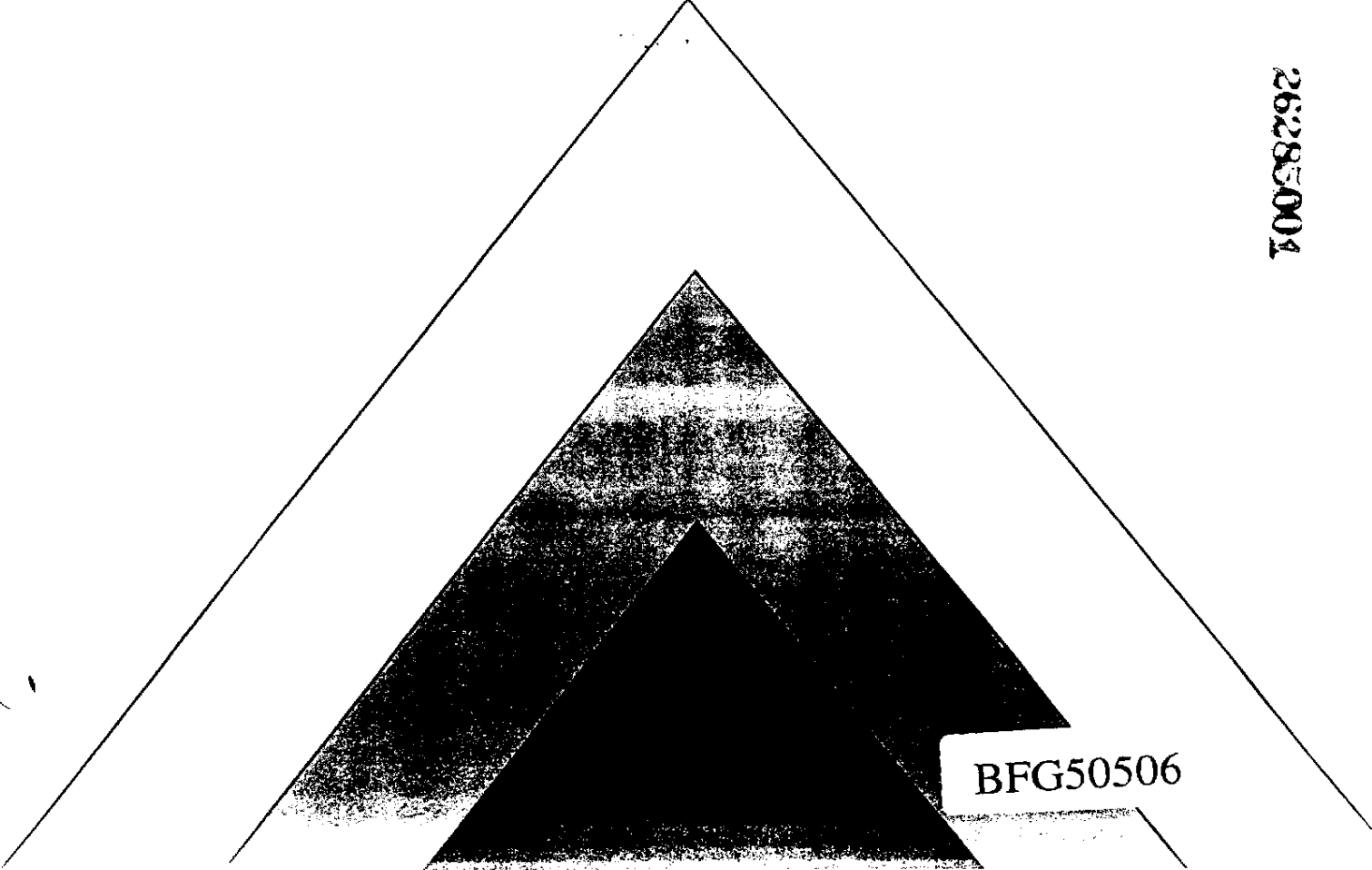
Bulletin G-62
Second Edition
(Revised)

Issue Date:
January, 1981

MATERIAL SAFETY DATA

Geon[®] Vinyl Resins,
Compounds

26285004



BFG50506

ABOUT THIS BULLETIN

The data in this bulletin is applicable to all Geon® vinyl resins — general purpose type, Super EP type, dispersion resins, blending resins, powder coating resins — and to all grades of rigid, flexible and Geon® cellular vinyl compounds. This bulletin is not applicable to Geon® latexes nor to Geon® CPVC materials.

The data in this bulletin is limited to the safe handling and use of the PVC polymer itself and to PVC based compounds we manufacture. It does not include information on the suitability of PVC for any particular application nor discuss any precautions that may be necessary during product use in service.

The format used to report material safety data information is essentially similar to the U.S. Department of Labor Form OSHA 20 modified to facilitate description of our materials.

USER'S RESPONSIBILITIES

A bulletin such as this cannot be expected to cover all possible individual situations. In addition, the conditions under which our products are processed and used are beyond our control. The products described herein can be hazardous if not processed properly. As the user of Geon® vinyls has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if or where precautions, in addition to those described herein, are required. Any health hazard and safety information contained herein should be passed on to your customers or employees, as the case may be. BFGoodrich must

rely on the user of Geon® vinyls to utilize the information we have supplied to develop work practice guidelines and employee instructional programs for the individual operation.

DISCLAIMER OF LIABILITY

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this material. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

GENERAL INFORMATION

This bulletin has been prepared to provide guidelines and appropriate precautions to assist our customers in the safe handling and use of Geon® vinyl resins and compounds. BFGoodrich recommends that, before use, safety personnel and employees handling Geon® vinyls read and understand the information and precautions presented herein.

During processing or post-processing operations involving heat sufficient to cause mass melting, the sum total of the compounding ingredients present may emit vapors and odors irritating to the respiratory tract, eyes and skin. BFGoodrich recommends that Geon® vinyls always be used under well-ventilated conditions to avoid significant employee exposure.

SECTION I

Manufacturer's Name The BFGoodrich Company, Chemical Group
Address 6100 Oak Tree Boulevard, Cleveland, OH 44131
Telephone Number (216) 447-6000
Trademark Geon® Vinyls
Chemical Name Poly (vinyl chloride), PVC
Formula $(CH_2 CHCl)_n$
Chemical Family Vinyl Chloride Homopolymer (With the following exceptions):
Geon® 135: Copolymer of vinyl chloride/vinyl acetate
Geon® 137: Carboxy-modified vinyl chloride polymer
Geon® 138: Copolymer of vinyl chloride/vinyl ester

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SECTION II

HAZARDOUS INGREDIENTS

PVC resins contain small but detectable amounts of residual vinyl chloride monomer (VCM), a cancer-suspect agent. Extensive product and process improvements have resulted in the reduction of residual vinyl chloride monomer to a very low level in prime grades of major Geon® vinyl resins (See Table 1 and read Section V).

Other ingredients, such as stabilizers, lubricants,

plasticizers, and pigments are added with resin to manufacture PVC compounds. The sum total of all ingredients will emit vapors during processing. All possible health effects of these vapors are not known and individual sensitivities will vary. Exposure may produce acute health effects in some sensitive individuals. The effects relate primarily to eye, nose, and throat irritation. Efficient ventilation should be provided (read Section VIII) to prevent significant employee exposure. BFGoodrich recommends that these materials be used under well-ventilated conditions to avoid breathing these vapors.

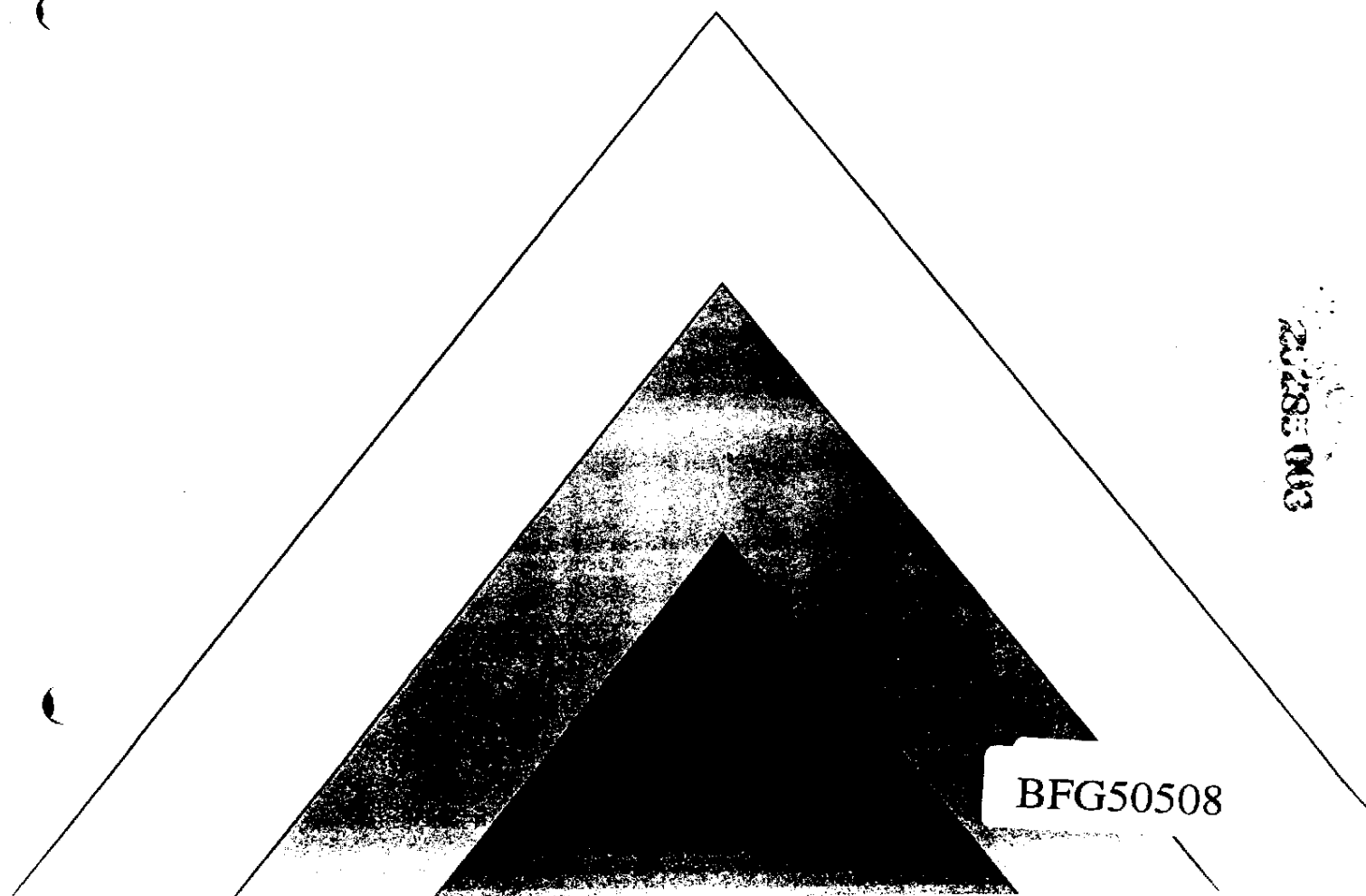
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G-62
Supplement

MATERIAL SAFETY DATA SHEET

Geon® Vinyl Resins,
Compounds



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SECTION II

HAZARDOUS INGREDIENTS

PVC Resin

- 1) Residual vinyl chloride monomer.

PVC Compound

- 1) Residual vinyl chloride monomer.
- 2) Heavy metal stabilizers.
- 3) Monomeric, polymeric or mixed ester plasticizer in flexible compound.
- 4) Pigments based on lead, chromium, mercuriums, iron oxides or other organics or inorganics.

For additional information read BFGoodrich Bulletin G-62, Second Edition (Revised)

Section V and Table 1

Section II

Section II

Section II and Table III

NOTE: Vinyl chloride (VCM) is an OSHA regulated material (REFER TO OSHA 1910.1017 FOR COMPLETE DETAILS). Current OSHA regulations require that no employee may be exposed to VCM concentrations greater than 1.0 ppm averaged over any eight hour period or 5.0 ppm averaged over any period not exceeding 15 minutes. All facilities where PVC is processed or fabricated (with heat sufficient to cause mass melting) shall be monitored to determine concentration of ambient VCM in the workplace atmosphere.

Section V

SECTION III

PHYSICAL DATA (Typical data, not specifications)

Specific Gravity ($H_2O = 1.0$).

Resin: 1.40.

Compound: See Product Data Sheet.

Solubility in Water — Slight

Particle Size

Resin: Refer to Bulletin G-62.

Compound: Cubes measuring approximately 3/16-inch per side; or powder of variable particle size due to compounding ingredients.

Table II

Appearance and Odor

Resin: White powder, practically odorless or bland odor.

Compound: Pigmented or unpigmented cubical granules or powder, slight odor.

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flash Ignition (ASTM D-1929) 735°F.

Self-Ignition (ASTM D-1929) 850°F.

Section IV

Extinguishing Media

Water. ABC dry powder. Protein type air foams. Carbon dioxide may be ineffective due to a lack of cooling capacity which may result in reignition.

Section IV

Special Fire Fighting Procedures

Wear self-contained breathing apparatus to prevent inhalation of combustion gases.

Section IV

Unusual Fire and Explosion Hazard

PVC powder compound, especially plasticized powder compounds, may have dust explosion potential due to compounding ingredients. Control or eliminate likely ignition sources. Prevent accumulation of potentially explosive dust concentrations. Ventilate well.

Section IV

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SECTION V**HEALTH AND HAZARD DATA**

Threshold Limit Value — None established.

Effects of Overexposure

Processing vapors may produce acute health effects in some individuals. The effects relate primarily to eye, nose and throat irritation. Individuals with bronchial asthma and other types of chronic obstructive respiratory diseases may develop bronchospasm if exposure is prolonged.

Emergency and First Aid Procedures

If irritation persists, remove affected individual from the area. Call a physician. Provide protection before re-entry. If overexposure occurs, leave the area.

SECTION VI**REACTIVITY DATA**

Stability — Stable.

Incompatibility (Materials to avoid)

In processing equipment, avoid contact of PVC resin or compound with acetal or acetal copolymers or with amine containing materials. At processing conditions these materials are mutually destructive and involve rapid decomposition.

Hazardous Decomposition Products

CO, CO₂, HCl, and (in small amounts) aromatic and aliphatic hydrocarbons. Geon® 135 will also contribute minor amounts of acetic acid as gas and smoke.

Hazardous Polymerization — Will not occur.

Section VI

Section IV

SECTION VII**SPILL OR LEAK PROCEDURES**

Steps to be taken if material is released or spilled

Sweep, shovel, or vacuum into containers for reuse or disposal.

Waste Disposal Method

Sanitary landfill or incineration in accordance with Federal, state or local regulations. Not hazardous for waste disposal per Federal regulations (40 CFR 261).

Section VII

SECTION VIII**SPECIAL PROTECTION INFORMATION**

Respiratory Protection — Dust

If conditions exist where dust is possible, wear NIOSH approved respirator.

Ventilation

Exhaust ventilation designed to pull vapors away from workers should be installed at all operations capable of creating dust, fumes or vapors.

Other Protection

- 1) Rubber gloves should be worn when cleaning condensate from exhaust hoods and other surfaces to prevent skin contact.
- 2) Safety glasses.

Section VIII

Section IV, Section VIII

Section IX

SECTION IX**SPECIAL PRECAUTIONS**

- 1) Open, handle and use Geon® vinyls under well-ventilated conditions.
- 2) Avoid breathing fumes.
- 3) Do not store or consume food in processing areas. Do not use processing equipment to heat food. Wash hands prior to eating, smoking or using toilet facilities.
- 4) Cool regrind before placing in containers to prevent decomposition.
- 5) Keep PVC resin and compound off the floor to prevent slipping.

Section IV, V

SECTION X**TRANSPORTATION INFORMATION**

For transportation purposes, Geon® vinyl resins and compounds are not defined or designated as a hazardous material by the U.S. Department of Transportation under Title 49 of the Code of Federal Regulations, 1979 edition.

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