

MATERIAL SAFETY DATA SHEET

GEON 178Version Number 1.0
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Print Date 11/4/2011**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE : Product Stewardship (440)-930-1395

Emergency telephone number : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**

Product name : GEON 178

Product code : P0178V000H

Chemical Name : Ethene, chloro-, homopolymer

CAS-No. : 9002-86-2

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

There are no known hazardous components above regulatory thresholds in this product.

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). OSHA considers VCM a suspect carcinogen and regulates it under 29 CFR 1910.1017. It is unlikely, under normal working conditions with adequate ventilation, that the OSHA action level and exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.

POTENTIAL HEALTH EFFECTS**Routes of Exposure:** : Inhalation, Ingestion**Acute exposure**

Inhalation : Resin particles, like other inert materials, can be mechanically irritating. At process temperatures, product emissions may cause irritation.

Ingestion : No adverse health effects are anticipated.

Eyes : Particulates, like other inert materials can be mechanically irritating. At process temperatures, product emissions may cause irritation.

Skin : Experience shows no unusual dermatitis hazard from routine handling.

Chronic exposure : Refer to Section 11 for Toxicological Information.

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Medical Conditions : None known.
Aggravated by Exposure:

4. FIRST AID MEASURES

Inhalation : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice.

Ingestion : Not an anticipated health hazard.

Eyes : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.

Skin : Wash off with soap and plenty of water. If skin irritation persists seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash point : 736 °F ASTM D1929

Flammable Limits

- Upper explosion limit : Not applicable
- Lower explosion limit : Not applicable

Autoignition temperature : Not relevant

Suitable extinguishing media : Water spray, dry powder, foam, carbon dioxide (CO₂).

Special Fire Fighting Procedures : Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.

Unusual Fire/Explosion Hazards : The solid polymer can only be burned with difficulty. Fires will tend to self-extinguish in the absence of a substantial external source of heat or flame. Hydrogen Chloride (HCl) is generated upon product combustion. Prompt cleaning of surfaces with water based detergents is indicated after a fire to minimize corrosive attack. Vinyl resin dust has a very low tendency to explode. The minimum ignition energy for vinyl resin dust clouds is much higher than that of natural materials such as starch and flour or of other plastic materials. However, as with any powder material, care should be taken to avoid creation of dust clouds and to minimize ignition sources.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls. Material can create slippery conditions.

Environmental precautions : Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.

Methods for cleaning up : Clean up promptly by sweeping or vacuum. Package all material in

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appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.

7. HANDLING AND STORAGE

- Handling : Take measures to prevent the build up of static electricity. Use only in area provided with appropriate exhaust ventilation. Material can create slippery conditions.
- Storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Respiratory protection : Under normal handling conditions a respirator is not required. If dusty conditions occur wear appropriate respiratory protection.
- Eye/Face Protection : Safety glasses with side-shields.
- Hand protection : Protective gloves.
- Skin and body protection : Long sleeved clothing.
- Additional Protective Measures : Safety shoes.
- General Hygiene Considerations : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

Exposure limit(s)

There are no known hazardous components above regulatory thresholds in this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|---------------------|--------------------|------------------|--------------------------------|
| Form | : Solid | Evaporation rate | : Not applicable. |
| Appearance | : powder, granular | Specific Gravity | : 1.4 g/cc |
| Color | : NOT APPLICABLE | Bulk density | : 20 to 25 lbs/ft ³ |
| Odor | : Very faint | Vapor pressure | : Not applicable |
| Melting point/range | : Not established | Vapor density | : Not applicable |
| Boiling Point: | : Not applicable | pH | : Not applicable |
| Water solubility | : Insoluble | | |

10. STABILITY AND REACTIVITY

- Stability : Stable.

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- Hazardous Polymerization : Will not occur.
- Conditions to avoid : To avoid thermal decomposition, do not overheat. Keep away from oxidizing agents and open flame.
- Incompatible Materials : 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.
- Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 Deg F (200 deg C) or short term heating at 482 Deg F (250 deg C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

There are no known hazardous components above regulatory thresholds in this product.

12. ECOLOGICAL INFORMATION

- Persistence and degradability : Not readily biodegradable.
- Environmental Toxicity : Adverse ecological impact is not known or expected under normal use.
- Bioaccumulation Potential : Does not bioaccumulate
- Additional advice : No data available.

13. DISPOSAL CONSIDERATIONS

- Product : Where possible, recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
- Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.

14. TRANSPORT INFORMATION

- U.S. D.O.T. / CA T.D.G. Classification (Non-bulk) : Not regulated for transportation.

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ground)

ICAO/IATA : Not regulated for transportation.

IMO / IMDG : Not regulated for transportation.

15. REGULATORY INFORMATION

US Regulations:

OSHA Status : There are no known hazardous components above regulatory thresholds in this product.

TSCA Status : All components of this product are listed on the TSCA inventory or are exempt.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for Mixture/Product
Vinyl chloride monomer	75-01-4	111,111 LB

California Proposition 65 : WARNING! This product contains a chemical known in the State of California to cause cancer.

Canadian Regulations:

WHMIS Classification : Not controlled.

DSL : Listed.

National Inventories:

Australia AICS : Listed.

China IECS : Listed.

Europe EINECS : Not determined.

Japan ENCS : Listed.

Korea KECI : Listed.

Philippines PICCS : Listed.

16. OTHER INFORMATION

POLYONE CORPORATION



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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.