

### MATERIAL SAFETY DATA SHEET

## **GEON 176**

Version Number 1.3 Page 1 of 6
Revision Date 01/22/2008 Print Date 12/3/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (440) 930-1395

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

or accident).

Product name : GEON 176
Product code : SR20000026

Chemical Name : Ethene, chloro-, homopolymer

CAS-No. : 9002-86-2

Product Use : Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

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

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. The end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

#### 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 : Resin particles, 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.



### MATERIAL SAFETY DATA SHEET

## **GEON 176**

 Version Number 1.3
 Page 2 of 6

 Revision Date 01/22/2008
 Print Date 12/3/2011

Medical Conditions Aggravated by Exposure: : None known.

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 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 applicable

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. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx),

other hazardous materials, and smoke are all possible.

#### 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



### MATERIAL SAFETY DATA SHEET

## **GEON 176**

 Version Number 1.3
 Page 3 of 6

 Revision Date 01/22/2008
 Print Date 12/3/2011

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

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 may not be 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. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under normal working conditions with adequate ventilation, that the 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.

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



### MATERIAL SAFETY DATA SHEET

## **GEON 176**

Version Number 1.3 Page 4 of 6
Revision Date 01/22/2008 Print Date 12/3/2011

Form : Solid Evaporation rate : Not applicable

Appearance : powder, granular Specific Gravity : 1.4

Color : NOT APPLICABLE Bulk density 20 to 25 lbs/ft3 : Not applicable : Very faint Odour Vapour pressure Melting point/range : Not established Vapour density : Not applicable Boiling Point: : Not applicable : Not applicable pН

Water solubility : Insoluble

### 10. STABILITY AND REACTIVITY

Stability : Stable.

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 (NOx), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F

(200 °C) or short term heating at 482 °F (250 °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



## MATERIAL SAFETY DATA SHEET

## **GEON 176**

 Version Number 1.3
 Page 5 of 6

 Revision Date 01/22/2008
 Print Date 12/3/2011

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. DOT Classification : Not regulated for transportation.

ICAO/IATA (air) : Not regulated for transportation.

IMO / IMDG (maritime) : 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 or exempt from the

TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Not applicable

California Proposition : Not applicable

65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Canadian Regulations:



### MATERIAL SAFETY DATA SHEET

## **GEON 176**

 Version Number 1.3
 Page 6 of 6

 Revision Date 01/22/2008
 Print Date 12/3/2011

National Pollutant Release Inventory (NPRI)

Not applicable

WHMIS Classification : Not controlled.

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.

National Inventories:

Australia AICS : Listed

China IECS : Listed

Europe EINECS : Listed

Japan ENCS : Listed

Korea KECI : Listed

Philippines PICCS : Listed

### 16. OTHER INFORMATION

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.