



**Tenneco Polymers**  
A Tenneco Company

(2)

UUC 211470

NUMBER

159

**MATERIAL SAFETY DATA**

(Approved by U.S. Department of Labor as "essentially similar" to FORM OSHA-20)

| SECTION I IDENTIFICATION OF PRODUCT                                                            |                                                                            |                                                |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------|
| MANUFACTURER'S NAME<br><b>TENNECO POLYMERS, INC., RESEARCH &amp; DEVELOPMENT</b>               |                                                                            | EMERGENCY TELEPHONE NO.<br><b>609-386-9200</b> |
| ADDRESS<br><b>RIVER ROAD, P.O. BOX 129, FLEMINGTON, NEW JERSEY 08822</b>                       |                                                                            |                                                |
| TRADE NAME AND SYNONYMS<br><b>TENNECO PVC COPOLYMER DISPERSION RESIN 0565, 0665 (0565-1)</b>   |                                                                            |                                                |
| CHEMICAL NAME AND SYNONYMS<br><b>VINYLCHLORIDE - VINYL ACETATE COPOLYMER, VC/VAc COPOLYMER</b> |                                                                            |                                                |
| CHEMICAL FAMILY<br><b>CHLOROHYDROCARBON COPOLYMER</b>                                          | MOLECULAR FORMULA<br><b><math>\{CH_2CHCl\}_x\{CH_2CHOCOCH_3\}_y</math></b> | MOL. WT.                                       |

| SECTION II HAZARDOUS COMPONENTS OF MIXTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |                             |           |   |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------|-----------|---|-----------------------------|
| COMPONENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | % | THRESHOLD<br>LIMIT<br>VALUE | COMPONENT | % | THRESHOLD<br>LIMIT<br>VALUE |
| <p>OSHA Standard 1910.93q(.1017) on vinyl chloride sets a permissible exposure limit of 1ppm averaged over any 8 hr. period and 5ppm over any 15 minute period. On the basis that polyvinyl chloride may contain and release small amounts of monomer, the Standard applies to the manufacture, reaction, packaging, repackaging, storage, handling, use or transportation of PVC, but not to handling or use of "fabricated products", as defined, if not subject to processing sufficient in time or temperature to cause mass melting.</p> |   |                             |           |   |                             |

| SECTION III PHYSICAL DATA                                      |                                                                                                  |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| APPEARANCE AND ODOR<br><b>White powder, faint ester odor.</b>  |                                                                                                  |
| BOILING POINT<br>(DEGREES FAHRENHEIT)<br><b>Not applicable</b> | MELTING POINT<br>(DEGREES FAHRENHEIT) <b>Not applicable</b><br><b>Softens about 140 - 160°F.</b> |
| VAPOR PRESSURE<br>(MM. OF MERCURY)<br><b>Not applicable</b>    | SPECIFIC GRAVITY<br>(WATER = 1)<br><b>1.4</b>                                                    |
| VAPOR DENSITY<br>(AIR = 1)<br><b>Not applicable</b>            | PERCENT VOLATILE<br>(BY WEIGHT)<br><b>Approximately 1% (Moisture)</b>                            |
| SOLUBILITY IN WATER<br><b>Negligible</b>                       | EVAPORATION RATE<br>(BUTYLACETATE = 1)<br><b>Not applicable</b>                                  |

| SECTION IV FIRE AND EXPLOSION HAZARD DATA                                                                                                                                                                              |                                         |                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------|
| FLASH POINT (SPECIFY METHOD)<br>(DEGREES FAHRENHEIT) <b>Ignition about 735°F for PVC (ASTM D-1929)</b>                                                                                                                 | FLAMMABLE LIMITS<br>(PERCENT BY VOLUME) | LOWER UPPER<br><b>Not applicable</b> |
| FIRE EXTINGUISHING MEDIA<br><b>Water spray, carbon dioxide or dry chemical.</b>                                                                                                                                        |                                         |                                      |
| SPECIAL FIRE-FIGHTING PROCEDURES<br><b>Water spray or fog may be helpful in reducing flame intensity and absorbing irritating fumes.</b>                                                                               |                                         |                                      |
| UNUSUAL FIRE AND EXPLOSION HAZARDS <b>NFPA lists ignition temperature of 1274°F for dust cloud. Produces combustible gases above 570°F. Fire conditions produce hydrogen chloride, requiring protective equipment.</b> |                                         |                                      |

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## SECTION V HEALTH HAZARD DATA

### THRESHOLD LIMIT VALUE

See Section II

**EFFECTS ON OVEREXPOSURE** None expected - inert resin. See Section IX. Prolonged breathing of concentrated dust may be harmful. (Processing at high temperatures produces fumes irritating to eyes and respiratory tract requiring local exhaust).

### EMERGENCY AND FIRST AID PROCEDURES

Ordinary measures of personal hygiene.

In case of exposure in hot processing move to fresh air, flush eyes with water.

## SECTION VI REACTIVITY DATA

|                                                                                                                    |                |   |                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------|----------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| STABILITY                                                                                                          | UNSTABLE       |   | CONDITIONS TO AVOID Normal processing temperature, about 350°F, causes slow darkening and decomposition. Higher heat increases rate and evolution of HCl. |
|                                                                                                                    | STABLE         | X |                                                                                                                                                           |
| INCOMPATIBILITY (Materials to avoid)<br>None in ordinary use. Soluble in certain ketones and organic solvents.     |                |   |                                                                                                                                                           |
| HAZARDOUS DECOMPOSITION PRODUCTS<br>Thermal decomposition produces HCl, and CO and CO <sub>2</sub> -(above-570°F). |                |   |                                                                                                                                                           |
| HAZARDOUS POLYMERIZATION                                                                                           | MAY OCCUR      |   | CONDITIONS TO AVOID<br>None in ordinary use.                                                                                                              |
|                                                                                                                    | WILL NOT OCCUR | X |                                                                                                                                                           |

## SECTION VII SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Sweep up and remove to disposal container.

### WASTE DISPOSAL METHOD

Bury in an approved landfill.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION** (Specify type) In case of concentrated dust, use Bureau of Mines approved dust respiratory (NIOBM TC-21C-132 or equivalent). See Sections II and IX.

|             |                                                |                                     |
|-------------|------------------------------------------------|-------------------------------------|
| VENTILATION | LOCAL EXHAUST<br>For hot processing.           | SPECIAL<br>Vent to elevated stack.  |
|             | MECHANICAL (General)<br>For ordinary handling. | OTHER<br>Ventilate enclosed spaces. |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| PROTECTIVE GLOVES<br>Not ordinarily required. | EYE PROTECTION<br>Safety glasses. |
|-----------------------------------------------|-----------------------------------|

**OTHER PROTECTIVE EQUIPMENT** None required for ordinary handling. For hot processing local exhaust, safety glasses and gloves are recommended.

## SECTION IX SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE** OSHA Standard 1910.93q(.1017) requires monitoring and other precautions in storage, handling and use of polyvinyl chloride, and also labeling PVC "Contains Vinyl Chloride-Vinyl Chloride is a Cancer-Suspect Agent". New PVC resins with a low monomer content make it easier to operate below the OSHA action level of 0.5ppm in a processor's work area, assuming normal conditions and ventilation, simplifying compliance with some of the regulatory requirements. Further developments on resins and on regulations are pending.

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DATE

NAME AND TITLE

SHEET