



Tenneco Polymers
A Tenneco Company

(2)

UCC 211470

NUMBER

159

MATERIAL SAFETY DATA

(Approved by U.S. Department of Labor as "essentially simi

SECTION I IDENTIFICATION OF PI

MANUFACTURER'S NAME	
TENNECO POLYMERS, INC., RESEARCH & DEVELOPMENT	
ADDRESS	
RIVER ROAD, P.O. BOX 129, FLEMINGTON, NEW JERSEY 088	
TRADE NAME AND SYNONYMS	
TENNECO PVC COPOLYMER DISPERSION RESIN 0565, 0665 (0	
CHEMICAL NAME AND SYNONYMS	
VINYLCHLORIDE - VINYL ACETATE COPOLYMER, VC/VAc COPOL	
CHEMICAL FAMILY	MOLECULAR FORM
CHLOROHYDROCARBON COPOLYMER	{CH ₂ CHCl}

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SECTION II HAZARDOUS COMPONENT

COMPONENT	%	THRESHOLD LIMIT VALUE	(UNITS)
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.			

SECTION III PHYSICAL DATA

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

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SECTION IV FIRE AND EXPLOSION HAZARD DATA

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

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EXHIBIT 4

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)

None in ordinary use. Soluble in certain ketones and organic solvents.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition produces HCl, and CO and CO₂ (above 570°F).

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID 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 For hot processing.	SPECIAL Vent to elevated stack.
	MECHANICAL EXHAUST For ordinary handling.	OTHER Ventilate enclosed spaces.

PROTECTIVE GLOVES

Not ordinarily required.

EYE PROTECTION

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

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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 of 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 0.5ppm in a processor's work area, assuming normal conditions and ventilation, simplifying compliance with some of the regulatory requirements. Further developments in resins and on regulations are pending.

DATE

NAME AND TITLE

SHEET NUMBER

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I hereby certify that the foregoing document is a true, correct and complete copy of the document in my possession.


Clifford Gandis

Subscribed and sworn to
before me this 14th day
of November, 1988.


Notary Public

My commission expires: 4/14/91

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