



Tenneco Polymers
A Tenneco Company

NUMBER

168

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 TENNECO POLYMERS, INC., RESEARCH AND DEVELOPMENT		EMERGENCY TELEPHONE NO. 609-386-9200
ADDRESS P.O. BOX 129, RIVER ROAD, FLEMINGTON, NEW JERSEY 08822		
TRADE NAME AND SYNONYMS 1684, 1688, 1689, 1755-1, 1755-5, 1776-2, TENNECO PVC COMPOUND, RECORD 1809, 1815-2, 1820-6		
CHEMICAL NAME AND SYNONYMS VINYL CHLORIDE - VINYL ACETATE COPOLYMER		
CHEMICAL FAMILY CHLOROHYDROCARBON COPOLYMER	MOLECULAR FORMULA {CH₂CHCl} x {CH₂CHOCOCH₃}_y	MOL. WT.

SECTION II HAZARDOUS COMPONENTS OF MIXTURES

COMPONENT	%	THRESHOLD LIMIT VALUE (UNITS)	COMPONENT	%	THRESHOLD LIMIT VALUE (UNITS)
Carbon Black	(0.1-1%)	3.5 mg/m ³			
Lead Compounds	(0 -2%)	0.2 mg/m ³			

SECTION III PHYSICAL DATA

APPEARANCE AND ODOR Black pellets, practically odorless	
BOILING POINT (DEGREES FAHRENHEIT) Not applicable	MELTING POINT (DEGREES FAHRENHEIT) Not applicable Softens about 130-150°F
VAPOR PRESSURE (MM. OF MERCURY) Not applicable	SPECIFIC GRAVITY (WATER = 1) 1.35 - 1.39
VAPOR DENSITY (AIR = 1) Not applicable	PERCENT VOLATILE (BY WEIGHT) Essentially non-volatile
SOLUBILITY IN WATER Negligible	EVAPORATION RATE (BUTYLACETATE = 1) Not applicable

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) 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. Shut off current in electrical equipment or wiring.	
UNUSUAL FIRE AND EXPLOSION HAZARDS NFPA lists ignition temperature of 608°F for PVC-plasticizer dust cloud and minimum concentration of 0.035 oz./cu. ft. Fire conditions produce hydrogen chloride, requiring protective equipment.	

TEN 2856

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

See Section II

EFFECTS OR OVEREXPOSURE

None expected in normal handling. (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. (See Section IX).
(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 CO ₂ (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)

None required in ordinary handling. See Section IX.

VENTILATION	LOCAL EXHAUST For hot processing.	SPECIAL Vent to stack or scrubber.
	MECHANICAL (General) For ordinary handling.	OTHER Ventilate enclosed spaces.
PROTECTIVE GLOVES Cotton gloves for hot processing.		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

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING OSHA Standard 1910.93q(.1017) on vinyl chloride limits exposure to 1ppm (8 hrs av.) and requires monitoring and other precautions in storage handling and use of polyvinyl chloride, including labeling "Contains Vinyl Chloride - Vinyl Chloride is a Cancer-Suspect Agent", excepting "fabricated products" not subject to "mass melting", as defined. New, low monomer content PVC compounds simplify operation below the OSHA 0.5ppm action level and compliance, assuming normal conditions and ventilation in a processor's work area. Further developments on resins and regulations are pending.



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NUMBER

200

MATERIAL SAFETY DATA

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SECTION I IDENTIFICATION OF PRODUCT		
MANUFACTURER'S NAME TENNECO POLYMERS, INC., RESEARCH & DEVELOPMENT		EMERGENCY TELEPHONE NO. 609-386-9200
ADDRESS RIVER ROAD, P.O. BOX 129, FLEMINGTON, NEW JERSEY 08822		
TRADE NAME AND SYNONYMS TENNECO PVC COMPOUND, RIGID 3780, 3782		
CHEMICAL NAME AND SYNONYMS POLY(VINYL CHLORIDE) COMPOUND		
CHEMICAL FAMILY CHLOROHYDROCARBON POLYMER	MOLECULAR FORMULA (CH ₂ CHCl) _n	MOL. WT

SECTION II HAZARDOUS COMPONENTS OF MIXTURES					
COMPONENT	%	THRESHOLD LIMIT VALUE	COMPONENT	%	THRESHOLD LIMIT VALUE
(UNITS)					
Tin Organic Compound	(0-3%)	0.1 mg/m ³			
Acrylic Resin	(0-2%)	10 mg/m ³	(ACGIH)		

SECTION III PHYSICAL DATA	
APPEARANCE AND ODOR White or colored pellets, practically odorless.	
BOILING POINT (DEGREES FAHRENHEIT) Not applicable	MELTING POINT (DEGREES FAHRENHEIT) Not applicable Softens about 160 - 180°F
VAPOR PRESSURE (MM. OF MERCURY) Not applicable	SPECIFIC GRAVITY (WATER = 1) 1.32 - 1.42
VAPOR DENSITY (AIR = 1) Not applicable	PERCENT VOLATILE (BY WEIGHT) Essentially non-volatile
SOLUBILITY IN WATER Negligible	EVAPORATION RATE (BUTYLACETATE = 1) Not applicable

SECTION IV FIRE AND EXPLOSION HAZARD DATA		
FLASH POINT (SPECIFY METHOD) (DEGREES FAHRENHEIT) Ignition about 735°F auto- ignition about 850°F (ASTM D-1929)	FLAMMABLE LIMITS (PERCENT BY VOLUME) Not applicable	LOWER UPPER
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. Shut off current in electrical equipment or wiring.		
UNUSUAL FIRE AND EXPLOSION HAZARDS NFPA lists ignition temperature of 752°F for layer and 1220°F for PVC dust cloud. Produces combustible gases above 570°F. Fire conditions produce hydrogen chloride, requiring protective equipment.		

SECTION V HEALTH HAZARD DATA**THRESHOLD LIMIT VALUE**

See Section II

EFFECTS OR OVEREXPOSURE

None expected in normal handling. (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. (See Section IX).
(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 CO ₂ (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)**

None required in ordinary handling. See Section IX.

VENTILATION	LOCAL EXHAUST For hot processing.	SPECIAL Vent to stack or scrubber.
	MECHANICAL (General) For ordinary handling.	OTHER Ventilate enclosed spaces.
PROTECTIVE GLOVES Cotton gloves for hot processing.		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

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING OSHA Standard 1910.1017(.93q) on vinyl chloride limits exposure to 1ppm (8 hr av.) and requires monitoring and other precautions in storage, handling and use of polyvinyl chloride, including labeling "Contains Vinyl Chloride - Vinyl Chloride is a Cancer-Suspect Agent", excepting "fabricated products" not subject to "mass melting" as defined. New, low monomer content PVC compounds simplify operation below the OSHA 0.5ppm action level and compliance, assuming normal conditions and ventilation in a processor's work area. Further developments on resins and regulations are pending.

DATE 3/12/84

NAME AND TITLE D. GOODMAN, PRODUCT REGULATIONS

SHEET NUMBER 200

TEN 2859



Tenneco Polymers
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NUMBER

190

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TRADE NAME AND SYNONYMS TENNECO PVC COMPOUND, RIGID 3773, 3774, 3775		
CHEMICAL NAME AND SYNONYMS POLY(VINYL CHLORIDE) COMPOUND		
CHEMICAL FAMILY CHLOROHYDROCARBON POLYMER	MOLECULAR FORMULA (CH ₂ CHCl) _n	MOL. WT.

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COMPONENT	%	THRESHOLD LIMIT VALUE	COMPONENT	%	THRESHOLD LIMIT VALUE
		(UNITS)			(UNITS)
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BOILING POINT (DEGREES FAHRENHEIT) Not applicable	MELTING POINT (DEGREES FAHRENHEIT) Not applicable Softens about 160 - 180°F
VAPOR PRESSURE (MM. OF MERCURY) Not applicable	SPECIFIC GRAVITY (WATER = 1) 3773, 3775 1.44 - 1.48 3774 1.40 - 1.44
VAPOR DENSITY (AIR = 1) Not applicable	PERCENT VOLATILE (BY WEIGHT) Essentially non-volatile
SOLUBILITY IN WATER Negligible	EVAPORATION RATE (BUTYLACETATE = 1) Not applicable

SECTION IV FIRE AND EXPLOSION HAZARD DATA		
FLASH POINT (SPECIFY METHOD) (DEGREES FAHRENHEIT) Ignition about 735°F auto- Ignition about 850°F (ASTM D-1929)	FLAMMABLE LIMITS (PERCENT BY VOLUME) LOWER UPPER Not applicable	
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SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

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