

MATERIAL SAFETY

Required under USDH Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	Plastics Engineering Company	EMERGENCY TELEPHONE NO.	(414) 458-2121
ADDRESS (Number, Street, City, State, and ZIP Code)	3518 Lakeshore Road, Sheboygan, WI 53081		
CHEMICAL NAME AND SYNONYMS	Phenolic Molding Compound	TRADE NAME AND SYNONYMS	PLENCO
CHEMICAL FAMILY	Phenol-Formaldehyde	FORMULA	558 Brown

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORROSION LUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES

Not listed in OSHA toxic substances list.

Contains encapsulated asbestos.

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	None	SPECIFIC GRAVITY (H ₂ O=1)	NA
VAPOR PRESSURE (mm Hg.)	NA	PERCENT VOLATILE BY VOLUME (%)	NA
VAPOR DENSITY (AIR=1)	NA	EVAPORATION RATE (— = 1)	NA
SOLUBILITY IN WATER	Negligible		
APPEARANCE AND ODOR	Granular. Odor — none to slightly phenolic.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	NA	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	Water, CO ₂ , Chemical Foam			
SPECIAL FIRE FIGHTING PROCEDURES	None indicated — but wear self-contained breathing apparatus when fighting fires in an enclosed area.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	Avoid dust accumulations — dust/air mixtures are explosive.			
CUTLER 385/399				
12/1/2006				



SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	See attached for vapors that can evolve during molding. Nuisance dust is 15 mg/m ³
EFFECTS OF OVEREXPOSURE	May cause skin irritation or dermatitis in sensitized individuals.
EMERGENCY AND FIRST AID PROCEDURES	Good personal hygiene. Avoid repeated or prolonged contact with skin — wash with soap and water at first opportunity. Flush eyes with water for at least 15 min.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID	None known
	STABLE	X		
INCOMPATIBILITY (Materials to avoid)		None known		
HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide, carbon monoxide, phenols, ammonia, formaldehyde.				
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID	
	WILL NOT OCCUR	X		None known

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Vacuum or sweep with sweeping compound to avoid generating dust.
WASTE DISPOSAL METHOD	1. Sanitary landfill recommended 2. Incineration

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)	Dust mask for nuisance dust	
VENTILATION	LOCAL EXHAUST	X
	MECHANICAL (General)	X
PROTECTIVE GLOVES	X	EYE PROTECTION
OTHER PROTECTIVE EQUIPMENT	Dust collection system. Work areas to be in compliance with OSHA asbestos regulations.	

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Avoid exposure to temperature extremes and moisture — can affect product performance.
OTHER PRECAUTIONS	Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of dust or vapors. Use with adequate ventilation.

No. 640-1111
U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration
In Dept. _____
per Dwg. _____
ion Name: _____

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
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SECTION I

MANUFACTURER'S NAME	Durez Division, Hooker Chemicals & Plastics Corporation	EMERGENCY TELEPHONE NO.	(716) 696-6000
ADDRESS (Number, Street, City, State, and ZIP Code) Walck Road, North Tonawanda, New York 14120			
CHEMICAL NAME AND SYNONYMS	N/A	TRADE NAME AND SYNONYMS	Durez 1308 Black
CHEMICAL FAMILY	N/A	FORMULA	N/A

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
	%	TLV (Units)
Phenol	<5%	Skin - 5PPM or 19mg/M ³
Asbestos	35%	2 fibers/ml >5µ in length

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H ₂ O=1)	1.53-1.55
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT. VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (=1)	N/A
SOLUBILITY IN WATER	Negligible		
APPEARANCE AND ODOR	Black granular material with slight odor of phenol		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	N/A	Lel	Uel
EXTINGUISHING MEDIA	Water, chemical foams or CO ₂ with water the preferred media.				
SPECIAL FIRE-FIGHTING PROCEDURES	Use normal equipment and procedures.				
CALLER	367/399				
DATE	12/1/2006				
UNUSUAL FIRE AND EXPLOSION HAZARDS	Organic dusts and mixtures can be explosive				

1. Dept.
per OHS
in Name:

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

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SECTION I

MANUFACTURER'S NAME	Durez Division, Hooker Chemicals & Plastics Corporation	EMERGENCY TELEPHONE NO.	(716) 696-6000
ADDRESS (Number, Street, City, State, and ZIP Code) Walck Road, North Tonawanda, New York 14120			
CHEMICAL NAME AND SYNONYMS	N/A	TRADE NAME AND SYNONYMS	Durez 18619 Brown
CHEMICAL FAMILY	N/A	FORMULA	N/A

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES			%	TLV (Units)
	%	TLV (Units)		
Phenol	<5%	Skin - 5PPM or 19mg/M ³		
Asbestos	40%	5 fibers/ml >5µ in length		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H ₂ O=1)	1.72-1.74
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (=1)	N/A
SOLUBILITY IN WATER	Negligible		
APPEARANCE AND ODOR	Brown granular material with slight odor of phenol		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	N/A	Lel	Uel
EXTINGUISHING MEDIA	Water, chemical foams or CO ₂ with water the preferred media.				
SPECIAL FIRE FIGHTING PROCEDURES	Use normal equipment and procedures.				
CUTLER 388/399 12/1/2006					
UNUSUAL FIRE AND EXPLOSION HAZARDS	Organic dust/air mixtures can be explosive				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

Treat as nuisance dust - TLV limit - 10mg/M³.

EFFECTS OF OVEREXPOSURE

Skin rash in allergic persons - nuisance dust irritation to eyes and respiratory tract.

EMERGENCY AND FIRST AID PROCEDURES

Use protective cream for skin of allergic persons - Flush eyes with clean water.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

INCOMPATIBILITY (Materials to avoid)

None known

HAZARDOUS DECOMPOSITION PRODUCTS

CO, CO₂, NH₃

HAZARDOUS POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Sweep or vacuum spills. To minimize dust, vacuum cleaning preferred.

WASTE DISPOSAL METHOD

Incinerate or dispose as land fill in accordance with local and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) NOT required for normal handling. Dust mask recommended for heavy dust concentration.

VENTILATION

LOCAL EXHAUST

Only if dust or fume concentration is high

SPECIAL

MECHANICAL (General)

Same as above

OTHER

PROTECTIVE GLOVES

Not required

EYE PROTECTION

Normal protection for dust or material particles.

OTHER PROTECTIVE EQUIPMENT

Dust collection equipment may be necessary for mechanical exhausts.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Although not a hazard, exposure to high temperature and/or moisture affects product performance.

OTHER PRECAUTIONS

12/1/2006 Traces of ammonia and phenol are present in vapors emitted during curing. Normal ventilation is adequate

MATERIAL SAFETY DATA SHEET

Required under USDH Safety and Health Regulations for Shipbuilding,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

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SECTION I

MANUFACTURER'S NAME Fiberite Corporation	EMERGENCY TELEPHONE NO. (507) 454-3611
ADDRESS (Number, Street, City, State, and ZIP Code) 501 West 3rd Street, Winona, MN 55987	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS Fiberite FM-6101
CHEMICAL FAMILY Phenolic Molding Compound	FORMULA N/A

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Asbestos - 2 fibers longer than 5 microns per cubic centimeter of air (OSHA-1976) permissible exposure (8-hour time-weighted average airborne concentrations)		
Phenol		25 Sppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	N/A	SPECIFIC GRAVITY (H ₂ O=1)	N/A
VAPOR PRESSURE (mm Hg)	N/A	PERCENT VOLATILE BY VOLUME (%)	NONE
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (H ₂ O=1)	N/A
SOLUBILITY IN WATER	Negligible	Maximum Bulk Factor	6
APPEARANCE AND ODOR Natural and black chopped fibers			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	Water spray, CO₂, Dry Chemical			
SPECIAL FIRE FIGHTING PROCEDURES Self-contained breathing apparatus				
UNUSUAL REACTIONS AND EXPLOSION HAZARDS None in air may be flammable in unknown concentrations				

CUTLER 390/399
12/1/2006

SECTION V - HEALTH HAZARD	
HAZARD STATEMENT	This is a mixture. See Section II.
EFFECTS OF EXPOSURE	Continuous exposure to asbestos fibers extending over several years may result in limited lung capacity.
EMERGENCY AND FIRST AID PROCEDURES	NONE

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	XX	NONE
INCOMPATIBILITY (Materials to avoid)		NONE	
HAZARDOUS DECOMPOSITION PRODUCTS Phenol, formaldehyde, CO, CO ₂			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	XX	NONE

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Vacuum or scoop up spilled materials and discard if contaminated. Use judicious handling methods to prevent dust generation.	
WASTE DISPOSAL METHOD	
Bury as a chemical waste in accordance to federal, state, and local regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) As specified by OSHA according to fiber concentration.		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
Designed to meet exposure limits		
PROTECTIVE GLOVES	Rubber or plastic	EYE PROTECTION
		Safety glasses
OTHER PROTECTIVE EQUIPMENT		
As required by OSHA for exposures exceeding ceiling values.		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Avoid creating dust. The resin dust may be flammable and the fibers are a definite health hazard.	
OTHER PRECAUTIONS	
See Sections II, IV and V.	

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12/1/2006