

Material Safety Data Sheet May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910. 1200 Standard must be consulted for specific requirements		HMIS HAZARD RATING		Polysulfide Part A only			
		Health	2	FED-STD-313 Latest Revision			
Flammability	3						
Reactivity	0						
PPE	H						
OMB registration Number None		Type of Data Sheet New Revised <input checked="" type="checkbox"/> reformatted					
SECTION I General Information		Number of revised section: Supersedes 05/01/2004					
Commercial ID (as on label and list) CS-3201 Class B (Part A Black Tan)		Government contract or order number		N/A			
Manufactures Name Flamemaster Corporation		National Stock Number /CAN LSN /SIN		N/A			
Manufactures Address (No Street, City, State and zip) Chem seal Division 11120 Sherman Way Sun Valley CA 91352		Part number, product and or trade name CS-3201 Class A (Part A Black Tan))					
		Hazardous items		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Emergency Telephone Number (800) 424-9300 CHEM TREC		Information telephone number (818) 982-1650		Date prepared 11-17-2004			
Mfgr. CAGE code 14439		Name of Preparer Herbert Moore		Signature of preparer On File			
NRC License number N/A		EPA Registration Number N/A		Specification Number AMSS-7124			
Spec. Type N/A		Spec. Grade. N/A		Spec. Class A			
SECTION II - Hazardous Ingredients SARA III Information*							
Hazardous Components (Specific chemical identity; Common Name (s))		Other limits	By % weight	OSHA PEL	ACGHI TLV	NIOSH #	CAS #
** Liquid polysulfide polymer (none CFR 1910.1200)			55%	N / E	N / E	**	68611-50-7
Toluene (Methyl Benzene)			2%	50 ppm	50 ppm	XS5250000	00108-88-3
** Toxic Data Not Established							
All remaining Constituents are non-hazardous per FED-STD-313 All Constituents are listed in TSCA inventory; complete mixture is excluded Per TSCA Par. 710.4 (d) 95 (6) (7) Constituents are not listed in TSCA 12b CORR. LIST							
* Indicates toxic chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372							
SECTION III Physical /Chemical Characteristics							
Boiling Point 231° F		Specific Gravity (H ₂ O = 1) 1.6		Auto ignition Temperature N/A		Decomposition Temperature N/A	
Vapor Pressure (mm hg) 2		PH 8.5		% Volatile by Volume 4		Magnetism (milligauss) N/A	
Vapor Density Air = 1 3.1		Evaporation rate (Butyl Acetate = 1) 2.0		Viscosity 550 Poises		Corrosion Rate: N/A	
Solubility in Water Negligible		Melting Point Liquid at room temperature		Blank		Temp Material Reference	
Appearance and Odor: Black or Tan Heavy Syrup / Polysulfide odor						Volatile Organic Compound VOC 32 grams / liter	
SECTION - IV Fire and Explosion Hazard Data							
Flash Point (method used) 32° C ----- 90° F TCC			Flammable Limits N/A		LEL 1.3	UEL 7.1	
Extinguishing Methods: Dry chemical, CO ₂ , Foam, Water							
Special Fire Fighting Procedures In confined areas wear self contained breathing apparatus, cool exposed containers with fog nozzles							
Unusual Fire and Explosion Hazards Vapors are heavier than air and will collect at low points see (Section V)							
SECTION V - Reactivity Data							
Stable <input checked="" type="checkbox"/>	Unstable	Conditions to avoid Open Flame High Heat			Neutralizing Agents N/A		
Incompatibility (materials to avoid) Strong oxidizing agents				Hazardous Decomposition products H ₂ S, CO, CO ₂ , SO ₂ , Smoke			
Hazardous Polymerization May Occur		Will not Occur <input checked="" type="checkbox"/>		Conditions to avoid N/A			

FED-STD-313 Latest Rev		Material: CS-3201 Class A (Part A)		Date 11-17-2004	Page 2 Polysulfide part A only
SECTION VI - Health Hazard Data					
Route (s) of entry	Inhalation? yes	Skin? yes	Ingestion? yes		
Health Hazards (Acute and Chronic) Non established (possible skin irritation) not considered a primary skin irritant may lead to muscular weakness and dizziness, long-term exposure may lead to dermatitis, liver and kidney damage.					
INHALATION: vapor will irritate nose throat and respiratory tract, high concentration may cause dizziness					
INJECTION: can cause irritation of the gastrointestinal tract					
Carcinogenicity:	NTP? NO	IARC Monographs? NO	OSHA Regulated? NO		
Medical conditions generally aggravated by exposure: Pre existing skin disorders, respiratory tract, liver and kidney damage					
Signs and symptoms of exposure: Skin or eye irritation head ache and nausea with impaired coordination					
Emergency and first aid Procedures: Eyes: Flush with large amounts of water consult physician. Skin: wash with soap and water. Ingestion: If swallowed get immediate medical attention.					
SECTION VII - - Precautions for Safe Handling and Use					
Steps to be taken in the event the material is released or spilled: Remove sources of ignition. Scoop up and transfer to container for reaction with curing agent. Clean up remainder with sand or sweeping compound. Wash area with soap and water. Wear appropriate clothing and protective equipment. (section VIII)					
Waste disposal method: React with curing agent and dispose of as solid hazardous waste per Federal, State and local regulations					
Precautions to be taken handling or storing: Empty drums may contain explosive vapors Store below 120 degrees dry area away from acids, oxidizers, open flame or other possible ignition sources Ground containers when transferring.					
Other precautions: Wash hands thoroughly after handling this product prior to eating , drinking or smoking					
SECTION VIII - Control Measures					
Respiratory protection (specify type) When applying in any circumstances likely to produce airborne levels of solvent vapors in excess of the TLV or when mechanically abrading the cured material use an organic vapor cartridge or air supplied respirator.					
Ventilation:	Local exhaust Air	Special: N / A	Mechanical (general) Fan	Other N / A	
Protective gloves Type: Solvent resistant gloves			Eye protection Type: Safety Glasses / face shield		
Other protective clothing or Equipment Appropriate clothing to avoid prolonged skin contact					
Work /Hygienic practices: Safety shower, eye wash station and washing facilities should be available					
SECTION IX - Transportation					
Applicable regulations:					
49CFR X	IMO X	IATA X	Military Air (AFR 71-4)	IMDG	Marine Pollutant No UN number UN 1133
Shipping name: Not regulated		ID Number N / A	Reportable Quantity N / A		
Unit container Quart 24 fluid oz. can kit		DOT Spec. container N / A	Net explosive weight: N / A		
Hazard class: 3		Labels: Flammable Liquid			
DOT Exempt /DOD CCN N / A		Limited Quantity: Varies with quantity			
Aerosol propellant (s) N / A		U.S. Postal regulations: 124.122 Harmful mater			
Disposal Information: Incineration or land fill as is, or react with Part B dispose as hazardous solid waste					
EPA hazardous waste number /Code: D-001 ignitable		Hazardous waste characteristics: Sludge			
Disposal methods: Incineration or land fill, The material must be handled, packaged and transported according to Federal, State or local regulations					

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Material Safety Data Sheet		HMIS HAZARD RATING		CS-3202 Class B part B page 1			
May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910. 1200 Standard must be consulted for specific requirements		Health	1	FED-STD-313 Latest Revision			
		Flammability	1				
		Reactivity	1				
		PPE	G				
OMB registration None		Type of Data Sheet		reformatted			
SECTION I General Information		New Revised <input checked="" type="checkbox"/>		Supersedes 06-13- 2004			
Commercial ID (as on label and list) CS-3202 (part B)		Number of revised section:		Government contract or order number N / A			
Manufactures Name Flamemaster Corporation		National Stock Number /CAN LSN /SIN N / A		Part number, product and or trade name CS-3202 (part B)			
Manufactures Address (No Street, City, State and zip) Chem seal Division 11120 Sherman Way Sun Valley CA 91352		Hazardous items		Yes No X			
Emergency Telephone Number (800) 424-9300 CHEM TREC		Information telephone number (818) 982-1650		Date prepared 10-01-2004			
Mfgr. CAGE code 14439		Name of Preparer Herbert Moore		Signature of preparer On File			
NRC License number N / A		EPA Registration Number N / A		Specification Number N / A			
Spec. Type N / A		Spec. Grade. N / A		Spec. Class N / A			
SECTION II - Hazardous Ingredients SARA III Information*							
Hazardous Components (Specific chemical identity: Common Name (s))		Other limits	By % weight	OSHA PEL	ACGHI TLV	NIOSH #	CAS #
** Lead Dioxide			65	0.05mg/ M ³	0.05mg/ M ³	0G0700000	1309-60-0
** Lead Oxide			6	0.05mg/ M ³	0.05mg/ M ³	0G1750000	1317-36-8
Lead Dioxide, Lead Oxide are in a wetted out dispersion exposure limits are based on dust that is not present in this composition.							
All remaining Constituents are non-hazardous per FED-STD-313 All Constituents are listed in TSCA inventory; complete mixture is excluded Per TSCA Para. 710.4 (d) 95 (6) (7) Constituents are not listed in TSCA 12b CORR. LIST							
* Indicates toxic chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372							
SECTION III Physical /Chemical Characteristics							
Boiling Point Vehicle 340° C		Specific Gravity (H ₂ O = 1) 3.0		Auto ignition Temperature Not flammable		Decomposition Temperature N / A	
Vapor Pressure (mm hg) N / A		PH 6.8		% Volatile by Volume 3.0		Magnetism (milligauss) N / A	
Vapor Density Air = 1 N / A		Evaporation rate (Butyl Acetate = 1) NIL		Viscosity N / A		Corrosion Rate: N / A	
Solubility in Water Negligible		Melting Point Liquid at room temperature		Blank		Temp Material Reference	
Appearance and Odor: Brown paste oily odor						Volatile Organic Compound VOC 1 gm/ Liter	
SECTION - IV Fire and Explosion Hazard Data							
Flash Point (method used) > 93° C ----- > 200° F TCC			Flammable Limits N / A		LEL N / A		UEL N / A
Extinguishing Methods: Dry chemical, CO ₂ , Foam, Water							
Special Fire Fighting Procedures In confined areas wear self contained breathing apparatus with full face piece, cool exposed containers with fog nozzles							
Unusual Fire and Explosion Hazards Fire hazard exists if contact with oxidizable materials at high temperature occurs.							
SECTION V - Reactivity Data							
Stable X		Unstable		Conditions to avoid High heat		Neutralizing Agents N / A	
Incompatibility (materials to avoid) oxidizable materials		Hazardous Decomposition products Oxides of nitrogen, Carbon, Lead oxide and organics					
Hazardous Polymerization May Occur		Will not Occur X		Conditions to avoid N / A			

FED-STD-313 Latest Rev		Material: CS-3202 Part B Lead		Date 10-01-2004	Page 2 CS-3202 Class B part B page 2	
SECTION VI - Health Hazard Data						
Route (s) of entry	Inhalation?	Skin?		Ingestion?		
	No	No		Yes		
Health Hazards (Acute and Chronic)						
Acute: Weakness, Stupor Chronic: Kidney damage, Anemia, Reproductive damage						
Carcinogenicity:		NTP?	IARC Monographs?	OSHA Regulated?		
		No	No	No		
Medical conditions generally aggravated by exposure:						
None known						
Signs and symptoms of exposure:						
Headache, Muscle and joint pain, Neuromuscular dysfunction						
Emergency and first aid Procedures:						
Eyes: Flush with large amounts of water consult physician. Skin: wash with soap and water, Ingestion: Induce vomiting get immediate medical attention.						
SECTION VII - - Precautions for Safe Handling and Use						
Steps to be taken in the event the material is released or spilled:						
Dike and cover with non-oxidizable absorbent. Scoop up and transfer to container for reaction with curing agent. Clean up remainder with sand or non-oxidizable sweeping compound. Wash area with soap and water. Wear appropriate clothing and protective equipment. (section VIII)						
Waste disposal method:						
Return to smelter for reclamation or react with Base and dispose of as hazardous solid waste per Federal, State and local regulations						
Precautions to be taken handling or storing:						
Keep container tightly closed, store in a dry location (see Section VIII) wash hands thoroughly after handling						
Other precautions:						
Wash hands thoroughly after handling this product prior to eating , drinking or smoking						
SECTION VIII - Control Measures						
Respiratory protection (specify type)						
When applying in any circumstances likely to produce airborne levels of solvent vapors in excess of the TLV or when mechanically abrading the cured material use an organic vapor cartridge or air supplied respirator.						
Ventilation:	Local exhaust	Special:	Mechanical (general)	Other: If soot is formed use NIOSH approved respirator		
	Air	N / A	Fan			
Protective gloves Type:			Eye protection Type:			
Rubber			Safety Glasses			
Other protective clothing or Equipment						
Appropriate clothing to avoid prolonged skin contact						
Work /Hygienic practices:						
Safety shower, eye wash station and washing facilities should be available						
SECTION IX - Transportation						
Applicable regulations:						
49CFR	X	IMO	X	IATA	X	Military Air (AFR 71-4)
						IMDG
						Marine Pollutant
						UN number
Shipping name:		ID Number		Reportable Quantity		
Not regulated		N / A		N / A		
Unit container		DOT Spec. container		Net explosive weight:		
< 20 gms. in plastic container		N / A		N / A		
Hazard class:				Labels:		
N / A				Not required		
DOT Exempt /DOD CCN				Limited Quantity:		
N / A				N / A		
Aerosol propellant (s)				U.S. Postal regulations:		
N / A				124.122 Harmful mater		
Disposal Information:						
Incineration or land fill as is, or react with Part A dispose as solid waste						
EPA hazardous waste number /Code:			Hazardous waste characteristics:			
D-008 Lead			Sludge			
Disposal methods:						
When disposing of this material, the material must be handled, packaged and transported according to Federal, State or local regulations						

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