

SAFETY DATA SHEET

1. Identification

Product identifier	Fuel Barrier Cement
Other means of identification	
Product number	74-451-99 (quart), 74-451-99-2 (gallon)
Synonyms	DH7-158
Recommended use	Barrier cement.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier	/Distributor information
Supplier	
Company name	Goodrich Corporation
Address	Collins Aerospace, Interiors - Evacuation, Water & Lighting (Formerly De-icing and Specialty Systems) 1555 Corporate Woods Parkway
	Uniontown, Ohio 44685
	USA
E-mail	Terry.Sluss@utas.utc.com
Contact name	EH&S Manager
Telephone number	(330)374-4011
Emergency telephone number	(800)424-9300/ 1-703-741-5970

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2 (kidney, liver, nervous system, skin)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

OSHA defined hazards

Label elements

Not classified.



Signal word Hazard statement

Highly flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing genetic defects. May cause drowsiness or dizziness. May cause damage to organs (kidney, liver, nervous system, skin) through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist/vapors. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.
Response	In case of fire: Use appropriate media to extinguish. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	Contains 6,6'-di-tert-Butyl-4,4'-thiodi-m-cresol. May produce an allergic reaction.

3. Composition/information on ingredients

Mixtures

Chemical name		CAS number	%	
Phenol		108-95-2	1 - < 3	
o-Cresol		95-48-7	0.3 - < 0.7	
Methyl Ethyl Ketone		78-93-3	≤ 76	
Composition comments	All concentrations are in percent by weight ur percent by volume. The manufacturer has cla OSHA Hazard Communication Standard.			
4. First-aid measures				
Inhalation	Remove victim to fresh air and keep at rest in artificial respiration if needed. Call a poison co			
Skin contact	Take off immediately all contaminated clothin soap and water. If skin irritation occurs: Get n before reuse.			
Eye contact	Immediately flush eyes with plenty of water for present and easy to do. Continue rinsing. If e			
Ingestion	Rinse mouth. If vomiting occurs, keep head lo Get medical advice/attention if you feel unwel		doesn't get into the lu	ungs.
Most important symptoms/effects, acute and delayed	Behavioral changes. Decrease in motor funct cause drowsiness and dizziness. Headache. Jaundice. Rash. Severe eye irritation. Sympt and blurred vision. Skin irritation. May cause chronic effects.	Nausea, vomiting. Irritation of coms may include stinging, to	of nose and throat. earing, redness, swe	elling,
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and tre immediately. While flushing, remove clothes we ambulance. Continue flushing during transport observation. Symptoms may be delayed.	which do not adhere to affect	ted area. Call an	
General information	Take off all contaminated clothing immediatel advice/attention. If you feel unwell, seek medi that medical personnel are aware of the mate themselves. Show this safety data sheet to th before reuse.	ical advice (show the label v rial(s) involved, and take pre	here possible). Ensite cautions to protect	
5. Fire-fighting measures				

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Suitable extinguishing media

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed such as: Carbon oxides. Container may rupture from gas generation in a fire situation. The fire could easily be spread by the use of water in an area where the water could not be contained.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. USE WATER WITH CAUTION. Stop leak if you can do so without risk. Use water to keep fire exposed containers cool and disperse vapors. Prevent buildup of vapors or gases to explosive concentrations.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.
6. Accidental release meas	sures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not breathe mist/vapors. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like verniculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Keep away from strong oxidizing agents. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Do not breathe mist/vapors. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Methyl Ethyl Ketone (CAS 78-93-3)	PEL	590 mg/m3	
		200 ppm	
o-Cresol (CAS 95-48-7)	PEL	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	PEL	19 mg/m3	
		5 ppm	
US. ACGIH Threshold Limit Value	S		
Components	Туре	Value	Form
Methyl Ethyl Ketone (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
o-Cresol (CAS 95-48-7)	TWA	20 mg/m3	Inhalable fraction and vapor.
Phenol (CAS 108-95-2)	TWA	5 ppm	
US. NIOSH: Pocket Guide to Cher	mical Hazards		
Components	Туре	Value	
Methyl Ethyl Ketone (CAS 78-93-3)	STEL	885 mg/m3	
		300 ppm	
	TWA	590 mg/m3	
		200 ppm	
o-Cresol (CAS 95-48-7)	TWA	10 mg/m3	
		2.3 ppm	
Phenol (CAS 108-95-2)	Ceiling	2.3 ppm 60 mg/m3	
Phenol (CAS 108-95-2)	Ceiling		
Phenol (CAS 108-95-2)	Ceiling TWA	60 mg/m3	
Phenol (CAS 108-95-2)	-	60 mg/m3 15.6 ppm	

Biological limit values

ACGIH Biological Exposure Indices Components Value Determinant Specimen **Sampling Time** Methyl Ethyl Ketone (CAS 2 mg/l MEK Urine * 78-93-3) Phenol (CAS 108-95-2) 250 mg/g Phenol with Creatinine in * hydrolysis urine

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation	
o-Cresol (CAS 95-48-7)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.
US - Minnesota Haz Subs: Skin designation applies	
o-Cresol (CAS 95-48-7)	Skin designation applies.
Phenol (CAS 108-95-2)	Skin designation applies.
US - Tennessee OELs: Skin designation	
o-Cresol (CAS 95-48-7)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.
US ACGIH Threshold Limit Values: Skin designation	
o-Cresol (CAS 95-48-7)	Can be absorbed through the skin.

Phenol (CAS 108-95-2) US. NIOSH: Pocket Guide to	Can be absorbed through the skin.	
Phenol (CAS 108-95-2)	Can be absorbed through the skin. for Air Contaminants (29 CFR 1910.1000)	
o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)	Can be absorbed through the skin. Can be absorbed through the skin.	
Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.	
Individual protection measures,	such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.	
Skin protection		
Hand protection	Wear nitrile or appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.	
Other	Wear flame resistant coveralls, lab coat, or apron to prevent skin contact.	
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.	
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.	
General hygiene considerations	Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Cement.
Color	Amber liquid.
Odor	Aromatic.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	132.8 °F (56 °C) at 760 mm Hg
Flash point	< 15.8 °F (< -9.0 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	1.4 %
Flammability limit - upper (%)	11.4 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	78 mmHg (for component) (68 °F (20 °C))
Vapor density	Heavier than air (Air = 1).
Relative density	0.87 - 0.88 (H2O = 1) (77 °F (25 °C))
Solubility(ies)	
Solubility (water)	Insoluble in water; soluble in organic solvents.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	690 °F (365.56 °C)

Fuel Barrier Cement

Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC	70 % weight [Test Method: Estimated].

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. Exothermic reaction may occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not store at temperatures above 300 F. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Amines. Ammonia. Caustics. Isocyanates.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Behavioral changes. Decrease in motor functions. Defatting of the skin. Edema. Narcosis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Jaundice. Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	Harmful if swallowed.		
Components	Species	Test Results	
Methyl Ethyl Ketone (CAS	5 78-93-3)		
<u>Acute</u>			
Dermal			
LD50	Rabbit	> 8000 mg/kg	
		> 10 ml/kg, 24 Hours	
Inhalation			
LC50	Mouse	11000 ppm, 45 Minutes	
	Rat	11700 ppm, 4 Hours	
Oral			
LD50	Rat	2054 mg/kg	
o-Cresol (CAS 95-48-7)			
Acute			
Dermal			
LD50	Rat	620 mg/kg	
Inhalation			
LD50	Rat	29 mg/m³	
Oral			
LD50	Rat	121 mg/kg	

Components	Species	Test Results			
Phenol (CAS 108-95-2)					
<u>Acute</u>					
Dermal					
LD50	Rat	669 mg/kg			
Oral					
LD50	Rat	317 mg/kg			
Skin corrosion/irritation	Causes skin irritation.				
Serious eye damage/eye irritation	Causes serious eye irritation.				
Respiratory or skin sensitizatio	n				
Respiratory sensitization	Not available.	Not available.			
Skin sensitization	This product is not expected to cause skin sensitization.				
Germ cell mutagenicity	Suspected of causing genetic defects.				
Carcinogenicity	Not classifiable as to carcinogenicity to humans.				
IARC Monographs. Overall	Evaluation of Carcinogenicity				
Phenol (CAS 108-95-2) NTP Report on Carcinogen	3 Not classifiable as to carcinogenicity to humans. s				
Not listed.	ed Substances (29 CFR 1910.1001-1053)				
Not listed.	a substances (25 cm (1510,1001-1035)				
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.				
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.				
Specific target organ toxicity - repeated exposure	May cause damage to organs (kidney, liver, nervous system, skin) through prolonged or repeated exposure.				
Aspiration hazard	Not available.				
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.				

12. Ecological information

Harmful to	to aquatic life with long lasting effects.		
Species		Test Results	
5 78-93-3)			
EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours	
LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours	
LC50	Salmo trutta	6.2 mg/l, 96 hours	
EC50	Pseudokirchneriella subcapitata	61.1 mg/l, 96 hours	
EC50	Ceriodaphnia dubia	3.1 mg/l, 48 hours	
LC50	Pimephales promelas	24.9 mg/l, 96 hours	
ty No data is	s available on the degradability of any ingre	dients in the mixture.	
ctanol / water (log Kow)		
5 78-93-3)	0.29		
	5 78-93-3) EC50 LC50 EC50 EC50 EC50 LC50 ty No data is	§ 78-93-3) EC50 Water flea (Daphnia magna) LC50 Sheepshead minnow (Cyprinodon variegatus) LC50 Salmo trutta EC50 Pseudokirchneriella subcapitata EC50 Ceriodaphnia dubia LC50 Pimephales promelas ty No data is available on the degradability of any ingre	

Mobility in soil	No data available.
Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 F D035: Waste Methyl ethyl ketone The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	
UN number	UN1133
UN proper shipping name	Adhesives, containing a flammable liquid
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	149, B52, IB2, T4, TP1, TP8
Packaging exceptions	150
Packaging non bulk	173
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1133
UN proper shipping name	Adhesives containing flammable liquid
Transport hazard class(es)	_
Class	3
Subsidiary risk	-
Packing group	
Environmental hazards	No.
ERG Code	3L Read actaty instructions, SDS and amorganay presedures before bandling
IMDG	Read safety instructions, SDS and emergency procedures before handling.
UN number	UN1133
UN proper shipping name	ADHESIVES containing flammable liquid
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	
Environmental hazards	"
Marine pollutant	No.
EmS	F-E, S-D
	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	

15. Regulatory information

TSCA Section 12(b) Export Notification (40 CFR 767, Subpt. D) Not regulated. Not regulated. CERCL Hazardous Substance List (40 CFR 302.4) Methyl Entyl Ketone (CAS 78-93-3) Listed. Cresol (CAS 954-87) Listed. SARA 304 Emergency release notification Cresol (CAS 954-87) 100 LBS OCHRSDL (CAS 108-95-2) Not listed. Cresol (CAS 954-87) 100 LBS OSHA Specifically Regulated Substances (28 CFR 1910.1001-1053) Not listed. Cresol 300 LBS Totic Substances Control Act (TSCA) All components on the TSCA 8(b) inventory are designated "active". Superfund Amendments and Resulth/ritation Act of 1986 (SARA) SARA 302 Extremely hazardous substance Phenol 108-95-2 OSign 200 500 10000 Saka A31/312 Hazardous Yes Chemical name CAS number % by wt. Phenol 500 10000 Casefilde hazard Flarmable (pases, aerosols, liquids, or solds) Casefilde hazard Flarmable (pases, aerosols, liquids, or solds) Casendic (CAS) 108-95-2) 1 - < 3	S federal regulations		t is a "Hazardou 9 CFR 1910.120		d by the OSHA Hazard	Communication
Not regulated CERCLA Hazardous Substance List (40 CFR 302.4) Methyl Ethyl Katone (CAS 78-93.3) o-Cresol (CAS 95-46-7) D-Cresol (CAS 95-46-7) D-Cresol (CAS 108-95-2) OSIA Specifically Regulated Substances (29 CFR 1910.1001-1033) Not listed. SARA 302 Extremely hazardous substances CAS number Reportable Threshold quantity planning quantity (pounds) Phenol C-Cresol (CAS 95-47) D-Cresol (CAS 95-47) Chemical name CAS number Reportable planning quantity (pounds) Phenol C-Cresol (CAS 95-47) D-Cresol (CAS 95-47	TSCA Section 12(b)					
Methyl Ehyl Ketone (CAS 78-93-3) o-Cresol (CAS 98-8-7) DOBAL Specifical Regulated Substances (29 CFR 1910-1001-1053) Not listed. SARA 304 Entergency relaxes notification O-CRESOL (CAS 98-48-7) PHENOL (CAS 108-95-2) OBAL Specifical Regulated Substances (29 CFR 1910-1001-1053) Not listed. Toxic Substances Control Act (TSCA) Classified Anandoments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Chemical name CAS number Chemical name CAS number Phenol O-Cresol Classified hazard categories SARA 313 (TRI reporting) Chemical name CAS number Phenol Chemical name CAS number CAS number Chemical name CAS number Chemical name CAS number Phenol Chemical name CAS number CAS number Serious eye damage or eye imitation Serious eye damage or eye imitation Cerem cell mutagenicity Specific larget organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name Classified hazard Classified Nazard Classified Nazard Clas						
o-Cresol (CAS 95-49-7) Phenol (CAS 108-95-2) Listed. SARA 304 Emergency release notification 0-CRESOL (CAS 96-64-7) PHENOL (CAS 108-95-2) Not listed. Toxic Substances Control Act (TSCA) Mol listed. Toxic Substances Control Act (TSCA) SARA 302 Extremely hazardous substance Chemical name CAS number Phenol Class filed hazard Categories Addit sovietly (any troth of exposure) SarA 313 (TRI reporting) Class filed hazard Categories SARA 313 (TRI reporting) Chemical name CAS number Phenol Class filed hazard Case number Phenol Class filed hazard Case number Sara 500 Sara 513 (TRI reporting) Chemical name CAS number Phenol Class filed hazard Case number Methyl Ethyl Ketone (CAS 78-93-3) Chemical Class 95-47) Phenol (CAS 108-95-2) Phenol (CAS 108-95-			• • •	1		
Phenol (CAS 108-95-2) Listed. SARA 304 Emrogram Profess notification O-CRESOL (CAS 96-48-7) 100 LBS OSIA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. Toxic Substances Control Act (TSCA) All components on the TSCA 8(b) inventory are designated "active". uperfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Chemical name CAS number Reportable Threshold planning quantity, (pounds) (pounds) Phenol 108-95-2 1000 500 1000 1000 1000 1000 1000 1000			3)			
SARA 304 Emergency release notification O-CRESOL (CAS 964-87.) 100 LBS PHENOL (CAS 108-95-2) 1000 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. Toxic Substances Control Act (TSCA) All components on the TSCA 8(b) inventory are designated "active". paperfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Externely hazardous substance Chemical name CAS number Reportable Intreshold planning quantity, ipounds) invervalue (pounds) Phenol 108-95-2 1000 500 10000 10000 0000 SARA 311312 Hazardous Yes chemical Classified hazard Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) SARA 313 (TRI reporting) Chemical name CAS number Yes chemical name CAS number Yes chemical Classified hazard Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Serious eye damage or eye irritation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name CAS number ½ by wt. Phenol 108-95-2 1 - < 3 ther federal regulations Cicen Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List o-Cressol (CAS 954-9.7) Phenol 108-95-2 1 - < 3 ther federal regulations Cicen Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List o-Cressol (CAS 954-9.7) Phenol (CAS 109-95-2) Cien Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List o-Cressol (CAS 954-9.7) Not regulated. Safe Drinking Water Act (SWWA) Drug Enforcement Administration (DEA). List 1, 8 Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priotity Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priotity Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priotity Substances Respiratory Health and Safety in the Flavor Manufacturing Workpla						
PHENOL (CAS 108-95-2) Not listed. Toxic Substances Control Act (TSCA) Mal components on the TSCA 8(b) inventory are designated "active". Inperfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Chemical name CAS number Reportable planning quantity (pounds) Phenol O-Cresol 95-48-7 100 Threshold planning quantity (pounds) Phenol Classified hazard Classified hazard Class		,	cation	LISTEO.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. Not listed. All components on the TSCA 8(b) inventory are designated "active". specifical name Chemical name CAS number Reportable quantity (pounds) Threshold planning quantity (pounds) Threshold planning quantity (pounds) Threshold planning quantity (pounds) Threshold planning quantity (pounds) Phenol 0.00 500 Chemical reagories CAS number Reportable (pounds) SARA 311/312 Hazardous Serious eye damage or eye imitation Germ coll mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name CAS number % by wt. Phenol 1.<<3						
Toxic Substances Control Act (TSCA) All components on the TSCA 8(b) inventory are designated "active". sportund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Threshold planning quantity (pounds) Threshold planning			ances (29 CFR			
perfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Chemical name CAS number Reportable Threshold planning quantity (pounds) Threshold planning the state the state Threshold Th	Not listed.					
SARA 302 Extremely hazardous substance Threshold planning quantity (pounds) Threshold planning quantity (planning	Toxic Substances Contr	ol Act (TSCA)	All o	components on the TS	CA 8(b) inventory are de	esignated "active".
Chemical name CAS number Reportable quarity (pounds) Threshold planning quarity (pounds) Phenol 108-95-2 1000 10000 10000 10000 SARA 311/312 Hazardous categories Yes	-		•	SARA)		
quantity (pounds) planning quantity (pounds) planning quantity (pounds) planning quantity (pounds) Phenol 108-95-2 1000 500 10000 SARA 311/312 Hazardous Yes 500 1000 10000 SARA 311/312 Hazardous Yes 500 1000 10000 SARA 311/312 Hazardous Yes 500 1000 10000 Sara Classified hazard Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name CAS number % by wt. Phenol 108-95-2 1 - < 3	•			Threehold	Threehold	Threshold
Phenol 108-95-2 1000 500 10000 o-Cresol 95-8-7 100 1000 10000 SARA 311/312 Hazardous Yes 100 1000 10000 Classified hazard Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eve damage or eve irritation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) CAS number % by wt. Phenol 108-95-2 1 - < 3		CAS number	quantity	planning quantity	planning quantity, lower value	planning quantity, upper value
SARA 311/312 Hazardous chemical Yes Classified hazard categories Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name CAS number % by wt. Phenol 108-95-2 1 - < 3	Phenol	108-95-2	1000			
chemical Classified hazard categories Fiarmable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or initation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name Chemical name CAS number % by wt. Phenol 108-95-2 1 - < 3	o-Cresol	95-48-7	100		1000	10000
categories Acute toxicity (any route of exposure) Skin corrosion or irritation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) SARA 313 (TRI reporting) Chemical name CAS number % by wt. Phenol 108-95-2 1 - < 3		s Yes				
Chemical name CAS number % by wt. Phenol 108-95-2 1 - < 3	categories	Skin corrosi Serious eye Germ cell m	Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Germ cell mutagenicity			
her federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA) Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority S state regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority S state regulations))	C	AS number	% by wt.	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA) Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Coresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority State regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) O-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)	Phenol		1	08-95-2	1 - < 3	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA) Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Coresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority Coresol (CAS 95-48-7) Phenol (CAS 108-95-2) Coresol (CAS 108-95-2) Coresol (CAS 95-48-7) Phenol (CAS 108-9	her federal regulations					
o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA) Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) Methyl Ethyl Ketone (CAS 78-93-3) Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) DS Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) Methyl Ethy	•	tion 112 Hazardo	ous Air Pollutai	nts (HAPs) List		
Not regulated. Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA) Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority State regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)	o-Cresol (CAS 95-48 Phenol (CAS 108-95-	-7) 2)			8 130)	
Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act. Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority State regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority						
Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority State regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority	Safe Drinking Water Act	Contains co	omponent(s) reg	ulated under the Safe I	Drinking Water Act.	
Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority State regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority	Drug Enforcement A	•	0EA). List 2, Es	sential Chemicals (21	CFR 1310.02(b) and 1	l310.04(f)(2) and
Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority State regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Low priority	Methyl Ethyl Kete	one (CAS 78-93-3	8)	6714		
DEA Exempt Chemical Mixtures Code Number Methyl Ethyl Ketone (CAS 78-93-3) 6714 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority S state regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Deal (CAS 108-95-2) Deal priority	Drug Enforcement A	Administration (D	DEA). List 1 & 2	-	xtures (21 CFR 1310.1	2(c))
FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Ethyl Ketone (CAS 78-93-3) Low priority o-Cresol (CAS 95-48-7) Low priority Phenol (CAS 108-95-2) Low priority S state regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) Phenol (CAS 108-95-2)				35 %WV		
o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2) S state regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)					lanufacturing Workpla	ace
S state regulations US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)	o-Cresol (CAS 95-48-7)		Low priority			
US. Massachusetts RTK - Substance List Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)	S state regulations			-		
Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)	-	- Substance Lis	t			
	Methyl Ethyl Ketone (o-Cresol (CAS 95-48-	(CAS 78-93-3) -7)				
Jei Barrier Gement SD	uel Barrier Cement					SDS US

US. New Jersey Worker and Community Right-to-Know Act

Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)

US. Rhode Island RTK

Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)

California Proposition 65



WARNING: This product can expose you to chemicals including Formaldehyde, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Acetaldehyde (CAS 75-07-0) Chloroethylene (CAS 75-01-4) Formaldehyde (CAS 50-00-0) Listed: April 1, 1988 Listed: February 27, 1987 Listed: January 1, 1988

Listed: March 16. 2012

California Proposition 65 - CRT: Listed date/Developmental toxin

Methanol (CAS 67-56-1)

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3,

subd. (a))

Methyl Ethyl Ketone (CAS 78-93-3) o-Cresol (CAS 95-48-7) Phenol (CAS 108-95-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	18-December-2019
Revision date	-
Version #	01
HMIS® ratings	Health: 2* Flammability: 3 Physical hazard: 0



Disclaimer

Goodrich Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.