



Fisher Scientific

Part of Thermo Fisher Scientific

Material Safety Data Sheet

Creation Date 13-Feb-2012

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Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Cytoseal[®] 60

Cat No. 23-244-256; 23-244-257

Synonyms No information available.

Recommended Use Laboratory chemicals

Company Richard Allan Scientific
A Subsidiary of Thermo Fisher Scientific
4481 Campus Drive
Kalamazoo, MI 49008
Tel: (800) 522-7270

Emergency Telephone Number
Chemtrec US: (800) 424-9300
Chemtrec EU: 001 (202) 483-7616

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable liquid and vapor. Irritating to eyes and skin. May cause irritation of respiratory tract. Vapors may cause drowsiness and dizziness. Aspiration hazard if swallowed - can enter lungs and cause damage. May cause harm to the unborn child. Possible risk of impaired fertility. Danger of serious damage to health by prolonged exposure. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Appearance Colorless

Physical State Liquid

odor aromatic

Target Organs Central nervous system (CNS), Eyes, Skin, Kidney, Liver, Blood, Heart

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes

Irritating to eyes.

Skin

Irritating to skin. May be harmful in contact with skin.

Inhalation

Inhalation may cause central nervous system effects. May cause irritation of respiratory tract. May be harmful if inhaled.

Ingestion

Aspiration hazard. May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects

May cause harm to the unborn child. Possible risk of impaired fertility. Danger of serious damage to health by prolonged exposure. May cause adverse liver effects. May cause adverse kidney effects.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Central nervous system disorders. Preexisting eye disorders. Kidney disorders. Liver disorders. Skin disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Acrylic Resin	28262-63-7	25 - 28
Butyl benzyl phthalate	85-68-7	4 - 6
2,6-Di-tert-butyl-p-cresol	128-37-0	< 1.0
Toluene	108-88-3	65 - 68

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	4.44°C / 40°F
Method	No information available.
Autoignition Temperature	No information available.
Explosion Limits	
Upper	No data available
Lower	No data available
Suitable Extinguishing Media	CO ₂ , dry chemical, dry sand, alcohol-resistant foam. Use water spray to cool unopened containers.
Unsuitable Extinguishing Media	Water may be ineffective
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA **Health 2** **Flammability 3** **Instability 0** **Physical hazards N/A**

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions**

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Do not get in eyes, on skin, or on clothing.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Remove all sources of ignition. Soak up with inert absorbent material. Take precautionary measures against static discharges. Keep in suitable, closed containers for disposal..

7. HANDLING AND STORAGE**Handling**

Use only under a chemical fume hood. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
2,6-Di-tert-butyl-p-cresol	TWA: 2 mg/m ³	(Vacated) TWA: 10 mg/m ³	TWA: 10 mg/m ³
Toluene	TWA: 20 ppm	(Vacated) TWA: 100 ppm (Vacated) TWA: 375 mg/m ³ Ceiling: 300 ppm (Vacated) STEL: 150 ppm (Vacated) STEL: 560 mg/m ³ TWA: 200 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
2,6-Di-tert-butyl-p-cresol	STEL: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³	TWA: 2 mg/m ³
Toluene	TWA: 50 ppm TWA: 188 mg/m ³ Skin	TWA: 50 ppm TWA: 188 mg/m ³	TWA: 20 ppm

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Appearance

Colorless

odor

aromatic

Odor Threshold

No information available.

pH

No information available.

Vapor Pressure

47 mmHg @ 20 °C

Vapor Density

No information available.

Viscosity

No information available.

Boiling Point/Range

110.6°C / 231°F

Melting Point/Range

No information available.

Decomposition temperature

No information available.

Flash Point

4.44°C / 40°F

Evaporation Rate

No information available.

Specific Gravity

0.97

Solubility

Insoluble in water

log Pow

No data available

10. STABILITY AND REACTIVITY

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Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Heat, flames and sparks.
Incompatible Materials	Strong oxidizing agents, Strong acids
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Butyl benzyl phthalate	2330 mg/kg (Rat)	6700 mg/kg (Rat)	6.7 mg/L (Rat) 4 h
2,6-Di-tert-butyl-p-cresol	890 mg/kg (Rat)	Not listed	Not listed
Toluene	636 mg/kg (Rat)	12124 mg/kg (Rat) 8390 mg/kg (Rabbit)	26700 ppm (Rat) 1 h

Irritation Irritating to eyes and skin

Toxicologically Synergistic Products No information available.

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Component	ACGIH	IARC	NTP	OSHA	Mexico
Butyl benzyl phthalate	Not listed	group 3	Not listed	Not listed	Not listed

Sensitization No information available.

Mutagenic Effects Mutagenic effects have occurred in humans.

Reproductive Effects Experiments have shown reproductive toxicity effects on laboratory animals.

Developmental Effects Developmental effects have occurred in experimental animals.

Teratogenicity Teratogenic effects have occurred in experimental animals..

Other Adverse Effects See actual entry in RTECS for complete information.

Endocrine Disruptor Information

Component	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Butyl benzyl phthalate	Group I Chemical	High Exposure Concern	Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Butyl benzyl phthalate	0.02 - 0.25 mg/L EC50 96 h 0.2 - 28.2 mg/L EC50 72 h	Lepomis macrochirus: LC50=1.7 mg/L 96h Salmo gairdneri: LC50=1.1 mg/L 96h	Not listed	0.97 mg/L EC50 = 48 h 1.28 mg/L EC50 = 48 h 0.76 mg/L EC50 > 48 h 0.9 - 1.1 mg/L EC50 48 h
2,6-Di-tert-butyl-p-cresol	0.42 mg/L EC50 > 72 h 6 mg/L EC50 = 72 h	LC50 >0.57 mg/L/96H (Goldfish)	EC50 = 7.82 mg/L 5 min EC50 = 8.57 mg/L 15 min EC50 = 8.98 mg/L 30 min	EC50 >0.31 mg/L/48H (Daphnia)
Toluene	433 mg/L EC50 > 96 h 12.5 mg/L EC50 = 72 h	50-70 mg/L LC50 96 h 5-7 mg/L LC50 96 h 15-19 mg/L LC50 96 h 28 mg/L LC50 96 h 12 mg/L LC50 96 h	EC50 = 19.7 mg/L 30 min	11.5 mg/L EC50 = 48 h 5.46 - 9.83 mg/L EC50 48 h

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available

Mobility

Component	log Pow
Butyl benzyl phthalate	4.91
2,6-Di-tert-butyl-p-cresol	4.17
Toluene	2.65

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Toluene - 108-88-3	U220	-

14. TRANSPORT INFORMATION

DOT

UN-No	UN1866
Proper Shipping Name	RESIN SOLUTION
Hazard Class	3
Packing Group	II

TDG

14. TRANSPORT INFORMATION

UN-No UN1866
 Proper Shipping Name RESIN SOLUTION
 Hazard Class 3
 Packing Group II

IATA

UN-No UN1866
 Proper Shipping Name RESIN SOLUTION
 Hazard Class 3
 Packing Group II

IMDG/IMO

UN-No UN1866
 Proper Shipping Name RESIN SOLUTION
 Hazard Class 3
 Packing Group II

15. REGULATORY INFORMATIONInternational Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Acrylic Resin	XU	X	-	-	-		X	X	X	X	X
Butyl benzyl phthalate	X	X	-	201-622-7	-		X	X	X	X	X
2,6-Di-tert-butyl-p-cresol	X	X	-	204-881-4	-		X	X	X	X	X
Toluene	X	X	-	203-625-9	-		X	X	X	X	X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Toluene	108-88-3	65 - 68	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Butyl benzyl phthalate	-	-	X	X
Toluene	X	1000 lb	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Toluene	X		-

OSHA

Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Butyl benzyl phthalate	100 lb	-
Toluene	1000 lb	-

California Proposition 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL
Butyl benzyl phthalate	85-68-7	Developmental	-
Toluene	108-88-3	Developmental Female Reproductive	-

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Butyl benzyl phthalate	X	X	X	X	-
2,6-Di-tert-butyl-p-cresol	X	X	X	-	X
Toluene	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ):	Y
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations**Mexico - Grade**

Serious risk, Grade 3

Canada

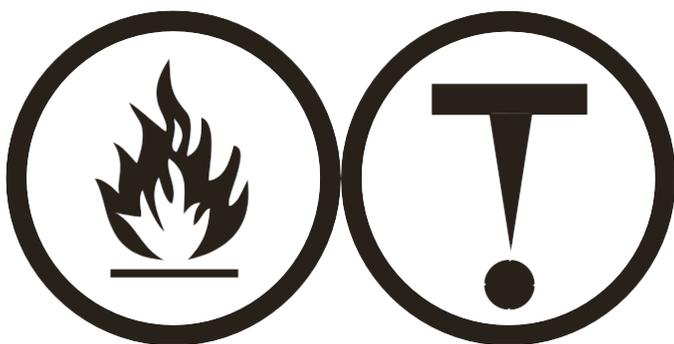
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B2 Flammable liquid

D2A Very toxic materials

D2B Toxic materials

**16. OTHER INFORMATION****Prepared By**

Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date

13-Feb-2012

Print Date

13-Feb-2012

Revision Summary

"***", and red text indicates revision

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS