

SAFETY DATA SHEET

Revision Date 12-Nov-2014 Creation Date 12-Nov-2014 **Revision Number 1**

1. Identification

Product Name Shandon Mount

Cat No.: 1900331, 1900333, 9990435

No information available **Synonyms**

Recommended Use Laboratory chemicals.

No Information available Uses advised against

Details of the supplier of the safety data sheet

Company **Emergency Telephone Number** Richard Allan Scientific A Subsidiary of Thermo Fisher Scientific

4481 Campus Drive Kalamazoo, MI 49008 Tel: (800) 522-7270

Chemtrec ÚS: (800) 424-9300 Chemtrec EU: 001 (202) 483-7616

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 2 Skin Corrosion/irritation Category 2 Serious Eye Damage/Eye Irritation Category 2 Category 1 Skin Sensitization Reproductive Toxicity Category 1A Specific target organ toxicity (single exposure) Category 3 Target Organs - Respiratory system, Central nervous system (CNS).

Specific target organ toxicity - (repeated exposure) Category 2

Target Organs - Kidney, Liver, spleen.

Aspiration Toxicity Category 1

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor May be fatal if swallowed and enters airways Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

May cause respiratory irritation

May cause drowsiness or dizziness

May damage fertility or the unborn child

May cause damage to organs through prolonged or repeated exposure



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

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

Keep cool

Wear protective gloves/protective clothing/eye protection/face protection

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

If skin irritation or rash occurs: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Eyes

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

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Toxic to aquatic life with long lasting effects

3. Composition / information on ingredients

Component	CAS-No	Weight %
Toluene	108-88-3	65-70
Butyl methacrylate	97-88-1	25-30
2,6-Di-tert-butyl-p-cresol	128-37-0	<1

Butyl benzyl phthalate	85-68-7	3-5

4. First-aid measures

General Advice If symptoms persist, call a physician. Show this safety data sheet to the doctor in

attendance.

Eve ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide

open while rinsing. If symptoms persist, call a physician.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Call a physician immediately. SPEEDY ACTION IS CRITICAL, GET MEDICAL AID IMMEDIATELY. If symptoms persist, call a physician. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all

contaminated clothes and shoes.

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. Obtain medical attention. Artificial respiration and/or oxygen may be necessary. Consult a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion Do not induce vomiting. Obtain medical attention. Clean mouth with water and drink

afterwards plenty of water. Do not induce vomiting without medical advice. Never give

anything by mouth to an unconscious person. Consult a physician.

Most important symptoms/effects Breathing difficulties. May cause allergic skin reaction. Inhalation of high vapor

concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle

pain or flushing

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media CO 2, dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire

with water spray.

Unsuitable Extinguishing Media Water may be ineffective

Flash Point 11.1 °C / 52 °F

Method - No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data 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.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO2) Hydrocarbons Aldehydes

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

HealthFlammabilityInstabilityPhysical hazards331N/A

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. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods for Containment and Clean Remove all sources of ignition. Soak up with inert absorbent material. Take precautionary **up** 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 get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest. Pay attention to flashback. No information available. Do not take internally.

Storage

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

8. Exposure controls / personal protection

Exposure Guidelines

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

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Toluene	TWA: 50 ppm TWA: 188 mg/m³ Skin	TWA: 50 ppm TWA: 188 mg/m³	TWA: 20 ppm
2,6-Di-tert-butyl-p-cresol	STEL: 10 mg/m ³	TWA: 10 mg/m³ STEL: 20 mg/m³	TWA: 2 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

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.

Personal Protective Equipment

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Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eve and face protection regulations in 29 CFR 1910.133 or European Standard

EN166. Tightly fitting safety goggles. Face-shield.

Wear appropriate protective gloves and clothing to prevent skin exposure. Long sleeved Skin and body protection

clothing. Apron. Impervious gloves.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard **Respiratory Protection**

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.

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area **Hygiene Measures**

and clothing.

9. Physical and chemical properties

Physical State Liquid **Appearance** Colorless

Characteristic hydrocarbon-like Odor **Odor Threshold**

No information available

рΗ Not applicable **Melting Point/Range**

No data available 43.3 °C / 109.9 °F 11.1 °C / 52 °F

Flash Point **Evaporation Rate**

No information available

Flammability (solid,gas)

Boiling Point/Range

No information available

Flammability or explosive limits

No data available No data available No information available

Lower **Vapor Pressure Vapor Density**

Upper

No information available 0.934

Relative Density Solubility

No information available

Partition coefficient; n-octanol/water

No data available No information available

Autoignition Temperature Decomposition Temperature

No information available

Viscosity

No information available

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions. Unstable upon depletion of inhibitor, heat sensitive.

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and **Conditions to Avoid**

sources of ignition.

Strong oxidizing agents, Strong acids **Incompatible Materials**

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrocarbons, Aldehydes

Hazardous Polymerization Hazardous polymerization may occur upon depletion of inhibitor.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. **Dermal LD50** Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Toluene	> 5000 mg/kg (Rat)	12000 mg/kg (Rabbit)	26700 ppm (Rat) 1 h
Butyl methacrylate	Not listed	10181 mg/kg (Rabbit)	4910 ppm (Rat) 4 h
2,6-Di-tert-butyl-p-cresol	890 mg/kg(Rat) >2000 mg/kg(Rat)	2000 mg/kg (Rat)	Not listed
Butyl benzyl phthalate	2330 mg/kg (Rat)	6700 mg/kg (Rat)	6.7 mg/L (Rat) 4 h

Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes, respiratory system and skin

Sensitization May cause sensitization by skin contact

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Toluene	108-88-3	Not listed				
Butyl methacrylate	97-88-1	Not listed				
2,6-Di-tert-butyl-p-cres ol	128-37-0	Not listed				
Butyl benzyl phthalate	85-68-7	group 3	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

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.

STOT - single exposure Respiratory system Central nervous system (CNS)

STOT - repeated exposure Kidney Liver spleen

Aspiration hazard No information available

delayed

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest

pain, muscle pain or flushing

Endocrine Disruptor Information

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

Other Adverse Effects

Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

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

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Toluene	12.5 mg/L EC50 = 72 h 433	50-70 mg/L LC50 96 h	EC50 = 19.7 mg/L 30 min	11.5 mg/L EC50 = 48 h 5.46
	mg/L EC50 > 96 h	5-7 mg/L LC50 96 h	_	- 9.83 mg/L EC50 48 h
		15-19 mg/L LC50 96 h		_
		28 mg/L LC50 96 h		
1		12 mg/L LC50 96 h		

Durk diseath a smilete	57 m m/L EOFO OC h	44 // 1 050 00 h	F050 07 // 5	20 mm/L EOE0 40 h
Butyl methacrylate	57 mg/L EC50 = 96 h	11 mg/L LC50 96 h	EC50 = 37 mg/L 5 min	32 mg/L EC50 = 48 h
			EC50 = 49 mg/L 15 min	
			EC50 = 55 mg/L 30 min	
			EC50 > 253.6 mg/L 18 h	
2,6-Di-tert-butyl-p-cresol	EC50 = 0.758 mg/L 96h	LC50 = 0.199 mg/L 96h	EC50 = 7.82 mg/L 5 min	EC50 >0.31 mg/L 48h
	EC50 = 6 mg/L 72 h	_	EC50 = 8.57 mg/L 15 min	_
	_		EC50 = 8.98 mg/L 30 min	
Butyl benzyl phthalate	0.2 - 28.2 mg/L EC50 72 h	Lepomis macrochirus:	Not listed	0.97 mg/L EC50 = 48 h 1.28
	0.02 - 0.25 mg/L EC50 96 h	LC50=1.7 mg/L 96h		mg/L EC50 = 48 h 0.76 mg/L
		Salmo gairdneri: LC50=1.1		EC50 > 48 h 0.9 - 1.1 mg/L
		mg/L 96h		EC50 48 h

Persistence and Degradability

No information available

Bioaccumulation/ Accumulation

No information available.

Mobility

 Component
 log Pow

 Toluene
 2.65

 Butyl methacrylate
 2.26

 2,6-Di-tert-butyl-p-cresol
 4.17

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.

4.91

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

Butyl benzyl phthalate

Hazard Class 3
Packing Group ||

TDG

UN-No UN1866

Proper Shipping Name RESIN SOLUTION

Hazard Class 3 Packing Group II

<u>IATA</u>

UN-No UN1866

Proper Shipping Name RESIN SOLUTION

Hazard Class 3
Packing Group ||

IMDG/IMO

UN-No UN1866

Proper Shipping Name RESIN SOLUTION

Hazard Class 3
Packing Group

15. Regulatory information

All of the components in the product are on the following Inventory lists: Australia X = listed China Canada The product is classified and labeled according to EC directives or corresponding national laws The product is classified and labeled in accordance with Directive 1999/45/EC Europe TSCA Korea Philippines Japan

International Inventories

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Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Toluene	Х	Х	-	203-625-9	-		Х	Χ	Χ	Χ	X
Butyl methacrylate	Х	Х	-	202-615-1	-		Х	Χ	Х	Х	Х
2,6-Di-tert-butyl-p-cresol	Х	Х	-	204-881-4	-		Х	Χ	Х	Χ	Χ
Butyl benzyl phthalate	Х	Х	-	201-622-7	-		Х	Х	Х	Х	Х

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	65-70	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
Toluene	X	1000 lb	X	X
Butyl benzyl phthalate	-	-	X	X

Clean Air Act

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

OSHA Occupational Safety and Health Administration 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
Toluene	1000 lb 1 lb	-
Butyl benzyl phthalate	100 lb	-

California Proposition 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Toluene	108-88-3	Developmental	-	Developmental
		Female Reproductive		

Butyl benzyl phthalate	85-68-7	Developr	nental	ntal -		Developmental	
State Right-to-Know							
Component	Massachusetts	New Jersey	Penns	ylvania	Illinois		Rhode Island
Toluene	Х	Х	2	X	Х		Х
Butyl methacrylate	Х	Х		X	-		-
2,6-Di-tert-butyl-p-cresol	Х	Х	2	X	-		X
Butyl benzyl phthalate	X	X		X	Х		-

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



16. Other information

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

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 SDS