

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version: 1.0

SECTION 1: Identification

1.1. Identification

Trade name : Clearium Mounting Medium
Product code : 3801100, 3801101, 3801102

1.2. Recommended use and restrictions on use

Recommended use : To coverslip a prepared specimen

Restrictions on use : Other uses

1.3. Supplier

Leica Biosystems Richmond, Inc 5205 Route 12 Richmond, IL 60071 - USA T 844-534-2262

 $\underline{\mathsf{LBSNA}\text{-}\mathsf{LBS}\text{-}\mathsf{QA@leicabiosystems}.com} \text{-} \underline{\mathsf{leicabiosystems}.com}$

1.4. Emergency telephone number

Organization/Company	Emergency number
ChemTrec	800-424-9300
International Calls (call collect)	+1 703-527-3887
Australia 24 Hr Poisons Information Centre	13 11 26

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 2 Skin corrosion/irritation Category 2

Reproductive toxicity Category 1B Specific target organ toxicity (single exposure) Category 3 Specific target organ toxicity (repeated exposure) Category 2

Aspiration hazard Category 1

Hazardous to the aquatic environment - Acute Hazard Category 2

Highly flammable liquid and vapor

Causes skin irritation

May damage fertility or the unborn child May cause drowsiness or dizziness May cause damage to organs

May be fatal if swallowed and enters airways

Toxic to aquatic life

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



<u>(!)</u>

GHS07



GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Highly flammable liquid and vapor

May be fatal if swallowed and enters airways

Causes skin irritation

May cause drowsiness or dizziness
May damage fertility or the unborn child

May cause damage to organs

01/16/2018 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary statements (GHS-US)

Toxic to aquatic life

: 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 equipment Use only non-sparking tools

Take precautionary measures against static discharge

Do not breathe mist/vapours/spray. Avoid breathing mists/vapors/spray Wash thoroughly after handling

Use only outdoors or in a well-ventilated area

Avoid release to the environment

Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Wash with plenty of soap and water

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower

If inhaled: Remove person to fresh air and keep comfortable for breathing

If exposed or concerned: Get medical advice/attention Call a POISON CENTER or doctor/physician if you feel unwell

Get medical advice/attention if you feel unwell

Do NOT induce vomiting

If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse

In case of fire: Use dry chemical, foam, or water spray for extinction. Store in a well-ventilated place. Keep container tightly closed

Store in a well-ventilated place. Keep cool

Store locked up

 $\label{local/regional/national/international} Dispose of contents/container in accordance with all local/regional/national/international$

regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Toluene	(CAS No) 108-88-3	< 60	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
Dibutyl Phthalate	(CAS No) 84-74-2	< 10	Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Butylated hydroxytoluene	(CAS No) 128-37-0	< 5	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

01/16/2018 EN (English US) 2/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If

skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.

Reactivity : Highly flammable liquid and vapor.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe

mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further

information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

01/16/2018 EN (English US) 3/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures

: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Toluene (108-88-3)		
ACGIH	ACGIH TWA (ppm)	20 ppm (Toluene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Visual impair; female repro; pregnancy loss; A4; BEI
OSHA	Remark (OSHA)	(2) See Table Z-2.

Dibutyl Phthalate (84-74-2)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ (Dibutyl phthalate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Testicular dam; eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m ³

Butylated hydroxytoluene (128-37-0)		
ACGIH	ACGIH TWA (mg/m³)	2 mg/m³ (Butylated hydroxytoluene (BHT); USA;
		Time-weighted average exposure limit 8 h; TLV -
		Adopted Value; Inhalable fraction and vapor)
ACGIH	Remark (ACGIH)	URT irr

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

01/16/2018 EN (English US) 4/11

Safety Data Sheet

Flash point

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

None needed with adequate ventilation. If the occupational exposure limit is exceeded, use an approved organic vapor respirator. Selection of respiratory protection depends on the contaminant type, form, and concentration. Select in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Colorless
Odor : Pungent

Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available

: 44 °F /6 °C

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable.

Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available

Specific gravity / density : 0.93

Solubility : No data available Log Pow : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available **Explosion limits** No data available **Explosive properties** : No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

01/16/2018 EN (English US) 5/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Toluene (108-88-3)	
LD50 oral rat	> 2000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 5580 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	12223 mg/kg (Rabbit; Literature study; Other; >5000 mg/kg bodyweight; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 20 mg/l/4h (Rat; Literature study)
ATE US (dermal)	12223 mg/kg body weight

Dibutyl Phthalate (84-74-2)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 20900 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 15 mg/l/4h (Rat)

Butylated hydroxytoluene (128-37-0)	
LD50 oral rat	890 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >6000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat; Experimental value)
ATE US (oral)	890 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Toluene (108-88-3)	
IARC group	3 - Not classifiable

Butylated hydroxytoluene (128-37-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

Specific target organ toxicity – repeated exposure

: May cause damage to organs .

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/effects after skin contact : Irritation.

01/16/2018 EN (English US) 6/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

Dibutyl Phthalate (84-74-2)	
LC50 fish 1	0.85 ppm (LC50; 96 h)
EC50 other aquatic organisms 1	9 mg/l (48 h; Scenedesmus subspicatus; Growth rate)
EC50 Daphnia 2	3.1 - 3.8 mg/l (EC50; 48 h)

Butylated hydroxytoluene (128-37-0)	
LC50 fish 1	>= 0.57 mg/l (LCO; EU Method C.1; 96 h; Brachydanio rerio; Semi-static system; Fresh water; Experimental value)
EC50 Daphnia 1	0.48 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	0.199 mg/l (LC50; ECOSAR v1.00; 96 h; Pisces)
EC50 Daphnia 2	0.15 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

12.2. Persistence and degradability

Toluene (108-88-3)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.	
Biochemical oxygen demand (BOD)	2.15 g O₂/g substance	
Chemical oxygen demand (COD)	2.52 g O₂/g substance	
ThOD	3.13 g O₂/g substance	
BOD (% of ThOD)	0.69	

Dibutyl Phthalate (84-74-2)		
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Adsorbs into the soil. Photolysis in the air.	
Biochemical oxygen demand (BOD)	0.43 g O₂/g substance	
ThOD	2.24 g O₂/g substance	
BOD (% of ThOD)	0.19	

Butylated hydroxytoluene (128-37-0)		
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil. Low potential for mobility in soil. Photooxidation in the air.	
Biochemical oxygen demand (BOD)	0.51 g O₂/g substance	
Chemical oxygen demand (COD)	2.27 g O₂/g substance	
ThOD	2.977 g O₂/g substance	
BOD (% of ThOD)	0.17	

12.3. Bioaccumulative potential

Toluene (108-88-3)				
BCF fish 2 90 (BCF; 72 h; Leuciscus idus; Static system; Fresh water)				
Log Pow	2.73 (Experimental value; Other; 20 °C)			
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).			
Dibutyl Phthalate (84-74-2)				
BCF fish 1 12 (BCF)				
BCF fish 2	117 (BCF)			
BCF other aquatic organisms 1	22 - 42 (BCF)			

01/16/2018 EN (English US) 7/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Dibutyl Phthalate (84-74-2)	
BCF other aquatic organisms 2	5000 (BCF; 72 h)
Log Pow	3.23 - 5.6
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

Butylated hydroxytoluene (128-37-0)		
BCF fish 1	230 - 2500 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 56 days; Cyprinus carpio; Flow-through system; Fresh water; Experimental value)	
Log Pow	5.1 (Experimental value)	
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).	

12.4. Mobility in soil

Toluene (108-88-3)			
Surface tension	0.03 N/m (20 °C)		
Dibutyl Phthalate (84-74-2)			
Surface tension	0.034 N/m (20 °C)		
Butylated hydroxytoluene (128-37-0)			
Log Koc	Koc,PCKOCWIN v1.66; 23030; Calculated value; log Koc; PCKOCWIN v1.66; 4.362; Calculated value		
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.		

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1866 Resin solution, 3, II

UN-No.(DOT) : UN1866
Proper Shipping Name (DOT) : Resin solution

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Quantity Limitations Passenger

aircraft/rail (49 CFR 173.27)

: 5 L

DOT Quantity Limitations Cargo aircraft only

(49 CFR 175.75)

: 60 L

Other information : No supplementary information available

01/16/2018 EN (English US) 8/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

Transport document description (IMDG) : UN 1866 RESIN SOLUTION, 3, II

UN-No. (IMDG) : 1866

Proper Shipping Name (IMDG) : RESIN SOLUTION
Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Limited quantities (IMDG) : 5 L

Air transport

Transport document description (IATA) : UN 1866 Resin solution, 3, II

UN-No. (IATA) : 1866

Proper Shipping Name (IATA) : Resin solution

Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Toluene (108-88-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 1000 lb

Dibutyl Phthalate (84-74-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 10 lb

Butylated hydroxytoluene (128-37-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Toluene (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

Dibutyl Phthalate (84-74-2)

Listed on the Canadian DSL (Domestic Substances List)

Butylated hydroxytoluene (128-37-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

01/16/2018 EN (English US) 9/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations

No additional information available

15.3. US State regulations

Toluene (108-88-3)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
Dibutyl Phthalate (84-7	4-2)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	Yes	Yes	

Toluene (108-88-3)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Dibutyl Phthalate (84-74-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Butylated hydroxytoluene (128-37-0)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Full text of H-phrases:

Highly flammable liquid and vapor	
Harmful if swallowed	
May be fatal if swallowed and enters airways	
Causes skin irritation	
May cause drowsiness or dizziness	
May cause damage to organs	
Very toxic to aquatic life	
Very toxic to aquatic life with long lasting effects	
Toxic to aquatic life with long lasting effects	
	Harmful if swallowed May be fatal if swallowed and enters airways Causes skin irritation May cause drowsiness or dizziness May cause damage to organs Very toxic to aquatic life Very toxic to aquatic life with long lasting effects

SDS US Leica

01/16/2018 EN (English US) 10/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

01/16/2018 EN (English US) 11/11