

### Kit Summary

**Product Code(s)** AB133131  
**Product name** Hepatic Lipid Accumulation/ Steatosis Assay Kit

#### Chloroquine Positive Control (25 mM)

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Chloroquine diphosphate salt	-	50-63-5	1.29	Xn; R22	Acute Tox. 4 (H302)	no data available

#### Fixative (10X)

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Formaldehyde	200-001-8	50-00-0	37	T; R23/24/25 C; R34 Carc. Cat. 1B; R45 R43 Muta. Cat. 2; R46	Skin Corr. 1B (H314) Skin Sens. 1 (H317) Muta. 1A (H340) Carc. 1A (H350) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331)	
Methanol	200-659-6	67-56-1	15	F; R11 T; R23/24/25  T; R39/23/24/25	Flam Liq. 1 (H224) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H330) STOT SE 1 (H370)	

#### Steatosis Assay Hematoxylin

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Ethylene glycol	-	107-21-1	35	Xn; R22	Acute Tox. 4 (H302)	no data available
Acetic acid	200-580-7	64-19-7	10	R10 C; R35	Skin Corr. 1A (H314) Flam Liq. 3 (H226)	no data available
Aluminium sulfate	-	7784-31-8	10	Xn; R41	Eye Dam. 1 (H318)	no data available
Sodium Iodate	-	7681-55-2	1	R8 Xn; R22, R42/43 Xn; R22	Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Acute Tox. 4 (H302)	no data available

Hematoxylin	-	517-28-2	1	Xi; R36/37/38	Eye Irrit. 2 (H319) STOT SE 3 (H335) Skin Irrit. 2 (H315)	no data available
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#### Lipid Droplets Assay Wash Solution

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Isopropanol	200-661-7	67-63-0	75	F; R11 Xi; R36 R67	STOT SE 3 (H336) Eye Irrit. 2 (H319) Flam Liq. 1 (H224)	

#### Lipid Droplets Assay Oil Red O Solution

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Isopropanol	200-661-7	67-63-0	100	F; R11 Xi; R36 R67	STOT SE 3 (H336) Eye Irrit. 2 (H319) Flam Liq. 1 (H224)	no data available

#### Lipid Droplets Assay Dye Extraction Solution

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Isopropanol	200-661-7	67-63-0	100	F; R11 Xi; R36 R67	STOT SE 3 (H336) Eye Irrit. 2 (H319) Flam Liq. 1 (H224)	

#### GHS / CLP - GHS - Classification



#### **Signal Word**

Danger

#### **Hazard statements**

H301 - Toxic if swallowed  
H330 - Fatal if inhaled  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H317 - May cause an allergic skin reaction  
H351 - Suspected of causing cancer  
H370 - Causes damage to organs  
H311 - Toxic in contact with skin  
H331 - Toxic if inhaled  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H302 - Harmful if swallowed  
H225 - Highly flammable liquid and vapor

### **Precautionary Statements - EU (§28, 1272/2008)**

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P310 - Immediately call a POISON CENTER or doctor/ physician

P363 - Wash contaminated clothing before reuse

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P312 - Call a POISON CENTER or doctor/ physician if you feel unwell

P307 + P311 - IF exposed: Call a POISON CENTER or doctor/ physician

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P284 - Wear respiratory protection

P405 - Store locked up

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P501 - Dispose of contents/ container to an approved waste disposal plant

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves/ eye protection/ face protection

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

### **2.3 Other information**

A safety datasheet follows for all potentially hazardous components – all other components are non-hazardous.

### **TRANSPORT INFORMATION**

<b>DOT</b>	Excepted Quantity
<b>Proper shipping name</b>	Chemical Kit
<b>Hazard class</b>	9
<b>UN/ID No</b>	3316
<b>Packing group</b>	II

<b>IATA</b>	Excepted Quantity
<b>UN/ID No</b>	3316
<b>Proper shipping name</b>	Chemical Kit
<b>Hazard class</b>	9
<b>Packing group</b>	II

<b>ADR</b>	Excepted Quantity
<b>Proper shipping name</b>	Chemical Kit
<b>Hazard class</b>	9
<b>UN/ID No</b>	3316
<b>Packing group</b>	II

# Safety Data Sheet

Issuing date no data available

Revision Date 05-Aug-2016

Version 4

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Chloroquine Positive Control (25 mM)

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
1 Kendall Square, Ste 341  
Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

**E-mail address** technical@abcam.com

**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Ozone	Not applicable
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### GHS Label elements, including precautionary statements

Not dangerous

### Other information

No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Chloroquine diphosphate salt	50-63-5	1-5	Acute Tox. 4 (H302)

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 4. FIRST AID MEASURES

<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	Clean mouth with water. Drink plenty of water.
<b>Notes to physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Not flammable.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none.
<b>Sensitivity to Static Discharge</b>	none.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Ensure adequate ventilation.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers.

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Technical measures/Storage conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering measures</b>	Showers Eyewash stations Ventilation systems
<b>Personal protective equipment</b>	
<b>Eye/face protection</b>	No special protective equipment required.
<b>Skin and body protection</b>	No special protective equipment required.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	No information available.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	No information available
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available	<b>solubility</b>	No information available.
<b>Explosion limits</b>	No information available	<b>Vapor density</b>	no data available
<b>Specific Gravity</b>	no data available		
<b>Evaporation rate</b>	No information available		
<b>VOC Content(%)</b>	not applicable		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Incompatible products</b>	None known based on information supplied.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	None known based on information supplied.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chloroquine diphosphate salt	623 mg/kg (Rat)		

**Chronic toxicity**

**Target Organ Effects** None known.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Chloroquine diphosphate salt				EC50 <i>Daphnia magna</i> (Water flea): 49.52 mg/l (48h)

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging** Do not re-use empty containers.

**14. TRANSPORT INFORMATION**

**DOT** Not dangerous goods

**IATA** Not dangerous goods

**ADR** Not dangerous goods

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Acute Health Hazard	no
Chronic Health Hazard	no

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<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations****International Regulations****WHMIS Note:**

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.

**16. OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed

**Revision Date**

05-Aug-2016

**Revision Note**

No information available.

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of MSDS**



# Safety Data Sheet

**Issuing date** no data available

**Revision Date** 05-Aug-2016

**Version** 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Fixative (10X)

**UN/ID No** 3316

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
1 Kendall Square, Ste 341  
Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

**E-mail address** technical@abcam.com

**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute inhalation toxicity - dust/mist	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ systemic toxicity (single exposure)	Category 1
Ozone	Not applicable

### GHS Label elements, including precautionary statements



**Signal Word**  
Danger

**Hazard statements**

H301 - Toxic if swallowed  
H311 - Toxic in contact with skin  
H331 - Toxic if inhaled  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H317 - May cause an allergic skin reaction  
H351 - Suspected of causing cancer  
H370 - Causes damage to organs

**Precautionary Statements - EU (§28, 1272/2008)**

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
P311 - Call a POISON CENTER or doctor/ physician  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/ physician  
P307 + P311 - IF exposed: Call a POISON CENTER or doctor/ physician  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P405 - Store locked up  
P501 - Dispose of contents/ container to an approved waste disposal plant  
P280 - Wear protective gloves/ eye protection/ face protection  
P361 - Remove/ Take off immediately all contaminated clothing  
P363 - Wash contaminated clothing before reuse  
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P271 - Use only outdoors or in a well-ventilated area  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P281 - Use personal protective equipment as required  
P308 + P313 - IF exposed or concerned: Get medical advice/ attention

**Other information**

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Formaldehyde	50-00-0	15-40	Skin Corr. 1B (H314) Skin Sens. 1 (H317) Muta. 1A (H340) Carc. 1A (H350) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331)
Methanol	67-56-1	10-30	Flam Liq. 1 (H224) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H330) STOT SE 1 (H370)

For the full text of the H-Statements mentioned in this Section, see Section 16

### 4. FIRST AID MEASURES

<b>General advice</b>	When symptoms persist or in all cases of doubt seek medical advice. Immediate medical attention is required. If symptoms persist, call a physician.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Immediate medical attention is required. May cause an allergic skin reaction.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting without medical advice. Consult a physician. Do NOT induce vomiting. Immediate medical attention is required.
<b>Notes to physician</b>	Treat symptomatically. May cause sensitization of susceptible persons.
<b>Protection of first-aiders</b>	Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Not flammable.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none.
<b>Sensitivity to Static Discharge</b>	none.

<b>Specific hazards arising from the chemical</b>	The product causes burns of eyes, skin and mucous membranes Thermal decomposition can lead to release of irritating gases and vapors In the event of fire and/or explosion do not breathe fumes
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions</b>	Use personal protective equipment. Evacuate personnel to safe areas. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
<b>Methods for cleaning up</b>	Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.
<b>Other information</b>	Refer to protective measures listed in sections 7 and 8.

**7. HANDLING AND STORAGE**

<b>Advice on safe handling</b>	Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.
<b>Technical measures/Storage conditions</b>	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Formaldehyde 50-00-0	Ceiling: 0.3 ppm	TWA: 0.75 ppm (vacated) TWA: 3 ppm unless specified in 1910.1048 (vacated) STEL: 10 ppm 30 min unless specified in 1910.1048 (vacated) Ceiling: 5 ppm unless specified in 1910.1048 STEL: 2 ppm see 29 CFR 1910.1048	IDLH: 20 ppm Ceiling: 0.1 ppm 15 min TWA: 0.016 ppm
Methanol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>

**Engineering measures** Showers  
Eyewash stations  
Ventilation systems

**Personal protective equipment**

**Eye/face protection** Tightly fitting safety goggles. Face-shield.  
**Skin and body protection** No special protective equipment required.  
**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures** When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection, remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	No information available.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	No information available
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available	<b>solubility</b>	No information available.
<b>Explosion limits</b>	No information available	<b>Vapor density</b>	no data available
<b>Specific Gravity</b>	no data available		
<b>Evaporation rate</b>	No information available		
<b>VOC Content(%)</b>	52		

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under recommended storage conditions.
<b>Incompatible products</b>	Incompatible with strong acids and bases. Incompatible with oxidizing agents.
<b>Conditions to avoid</b>	Exposure to air or moisture over prolonged periods.
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating gases and vapors.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b>Product Information</b>	Product is toxic by ingestion. Toxic in contact with skin Corrosive to skin, eyes and/or respiratory tract. May cause sensitization of susceptible persons. Toxic by inhalation, in contact with skin and/or if swallowed
<b>Inhalation</b>	Toxic by inhalation Avoid breathing vapors or mists Corrosive by inhalation Causes burns
<b>Eye contact</b>	Avoid contact with eyes Causes burns Corrosive to eyes
<b>Skin contact</b>	Toxic in contact with skin Wash thoroughly after handling Corrosive Causes burns
<b>Ingestion</b>	Toxic if swallowed Causes burns

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Formaldehyde	500 mg/kg ( Rat )		0.578 mg/L ( Rat ) 4 h
Methanol	5628 mg/kg ( Rat )	15800 mg/kg ( Rabbit )	83.2 mg/L ( Rat ) 4 h 64000 ppm ( Rat ) 4 h

### Chronic toxicity

**Chronic toxicity** Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen Avoid repeated exposure Possible risks of irreversible effects

**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	ACGIH	IARC	NTP	OSHA
Formaldehyde	A2	Group 1	Reasonably Anticipated	X

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP: (National Toxicity Program)**

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

X - Present

<b>Sensitization</b>	As a precaution the product should be treated as a sensitizer.
<b>Mutagenic effects</b>	Possible risks of irreversible effects.
<b>Target Organ Effects</b>	Central nervous system (CNS). Eyes. Gastrointestinal tract (GI). Respiratory system. Skin.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Formaldehyde		22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 1510: 96 h Lepomis macrochirus µg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static 0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100 - 136: 96 h Oncorhynchus mykiss mg/L LC50 static 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static		2: 48 h Daphnia magna mg/L LC50 11.3 - 18: 48 h Daphnia magna mg/L EC50 Static
Methanol		28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through		
<b>Chemical Name</b>		<b>log Pow</b>		
Formaldehyde		0.35		
Methanol		-0.77		

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging**

Do not re-use empty containers.

**US EPA Waste Number**

U122 U154

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formaldehyde - 50-00-0	U122	Included in waste streams: K009, K010, K038, K040, K156, K157		U122
Methanol - 67-56-1		Included in waste stream: F039		U154

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Formaldehyde	Toxic Ignitable
Methanol	Toxic Ignitable

**14. TRANSPORT INFORMATION**



**DOT** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**IATA** Excepted Quantity  
**UN/ID No** 3316  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**Packing group** II

**ADR** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Formaldehyde	50-00-0	37	0.1
Methanol	67-56-1	15	1.0

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** yes  
**Chronic Health Hazard** yes  
**Fire Hazard** no  
**Sudden Release of Pressure Hazard** no  
**Reactive Hazard** no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Formaldehyde	100 lb			X

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Formaldehyde	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
Methanol	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Formaldehyde	50-00-0	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Formaldehyde	X	X	X	X	X
Methanol	X	X	X	X	X

**International Regulations**

Chemical Name	Carcinogen Status	Exposure limits
Formaldehyde	A2	Mexico: Ceiling 2 ppm Mexico: Ceiling 3 mg/m <sup>3</sup>
Methanol		Mexico: TWA 200 ppm Mexico: TWA 260 mg/m <sup>3</sup> Mexico: STEL 250 ppm Mexico: STEL 310 mg/m <sup>3</sup>

**WHMIS Note:**

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.

**16. OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction H351 - Suspected of causing cancer if inhaled

H301 - Toxic if swallowed H311 - Toxic in contact with skin H331 - Toxic if inhaled H224 - Extremely flammable liquid and vapor H330 - Fatal if inhaled H370 - Causes damage to organs (a,b,c) if inhaled

**Hazard statements**

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H370 - Causes damage to organs

**Revision Date** 05-Aug-2016

**Revision Note** No information available.

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of MSDS**

# Safety Data Sheet

**Issuing date** no data available

**Revision Date** 05-Aug-2016

**Version** 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Steatosis Assay Hematoxylin

**UN/ID No** 3316

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
1 Kendall Square, Ste 341  
Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

**E-mail address** technical@abcam.com

**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1 Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Ozone	Not applicable

### GHS Label elements, including precautionary statements



**Signal Word**  
Danger

**Hazard statements**

H302 - Harmful if swallowed  
 H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H319 - Causes serious eye irritation  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H317 - May cause an allergic skin reaction

**Precautionary Statements - EU (§28, 1272/2008)**

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a POISON CENTER or doctor/ physician  
 P332 + P313 - If skin irritation occurs: Get medical advice/ attention  
 P304 + P341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing  
 P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P501 - Dispose of contents/ container to an approved waste disposal plant  
 P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P280 - Wear protective gloves/ eye protection/ face protection  
 P362 - Take off contaminated clothing and wash before reuse  
 P285 - In case of inadequate ventilation wear respiratory protection

**Other information**

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Ethylene glycol	107-21-1	15-40	Acute Tox. 4 (H302)
Aluminium sulfate	7784-31-8	7-13	Eye Dam. 1 (H318)
Acetic acid	64-19-7	7-13	Skin Corr. 1A (H314) Flam Liq. 3 (H226)
Sodium Iodate	7681-55-2	1-5	Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Acute Tox. 4 (H302)
Hematoxylin	517-28-2	1-5	Eye Irrit. 2 (H319) STOT SE 3 (H335) Skin Irrit. 2 (H315)

**For the full text of the H-Statements mentioned in this Section, see Section 16**

#### 4. FIRST AID MEASURES

<b>General advice</b>	If symptoms persist, call a physician. Immediate medical attention is required.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. If symptoms persist, call a physician. May cause an allergic skin reaction.
<b>Inhalation</b>	Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required. If symptoms persist, call a physician. Artificial respiration and/or oxygen may be necessary.
<b>Ingestion</b>	Rinse mouth. If symptoms persist, call a physician. Do NOT induce vomiting. Immediate medical attention is required.
<b>Notes to physician</b>	Treat symptomatically. May cause sensitization of susceptible persons.
<b>Protection of first-aiders</b>	Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Not flammable.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none.
<b>Sensitivity to Static Discharge</b>	none.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact.
<b>Protective equipment and precautions for firefighters</b>	Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers. Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Soak up with inert absorbent material. Dam up.

**7. HANDLING AND STORAGE**

**Advice on safe handling**                      Wear personal protective equipment. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Use only in area provided with appropriate exhaust ventilation.

**Technical measures/Storage conditions**                      Keep out of the reach of children. Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**                      This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic acid 64-19-7	STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m <sup>3</sup>	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>

**Engineering measures**                      Showers  
Eyewash stations  
Ventilation systems

**Personal protective equipment**

**Eye/face protection**                      Tightly fitting safety goggles. Face-shield.

**Skin and body protection**                      No special protective equipment required.

**Respiratory protection**                      If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**                      When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	No information available.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	No information available
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available	<b>solubility</b>	No information available.
<b>Explosion limits</b>	No information available	<b>Vapor density</b>	no data available
<b>Specific Gravity</b>	no data available		
<b>Evaporation rate</b>	No information available		
<b>VOC Content(%)</b>	45		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Incompatible products</b>	None known based on information supplied.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	None known based on information supplied.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b>Product Information</b>	Corrosive to skin, eyes and/or respiratory tract. Harmful if swallowed May cause sensitization of susceptible persons. Irritating to skin, eyes and / or respiratory tract.
<b>Inhalation</b>	Corrosive by inhalation Causes burns May cause irritation of respiratory tract
<b>Eye contact</b>	Causes burns Corrosive to eyes May cause irritation
<b>Skin contact</b>	Corrosive Causes burns May cause irritation
<b>Ingestion</b>	Causes burns Harmful if swallowed Ingestion may cause irritation to mucous membranes

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetic acid	3310 mg/kg ( Rat )	1060 mg/kg ( Rabbit )	11.4 mg/L ( Rat ) 4 h

### Chronic toxicity

<b>Chronic toxicity</b>	Avoid repeated exposure Repeated contact may cause allergic reactions in very susceptible persons
<b>Sensitization</b>	As a precaution the product should be treated as a sensitizer.
<b>Target Organ Effects</b>	Eyes. Respiratory system. Skin. Teeth.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Acetic acid		79: 96 h Pimephales promelas mg/L LC50 static 75: 96 h Lepomis macrochirus mg/L LC50 static		47: 24 h Daphnia magna mg/L EC50 65: 48 h Daphnia magna mg/L EC50 Static
<b>Chemical Name</b>			<b>log Pow</b>	
Acetic acid			-0.31	

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging** Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Acetic acid	Toxic Corrosive Ignitable

**14. TRANSPORT INFORMATION**

**DOT** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**IATA** Excepted Quantity  
**UN/ID No** 3316  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**Packing group** II

**ADR** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	yes
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances



Acetic acid	5000 lb			X
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**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Acetic acid	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acetic acid	X	X	X		X

**International Regulations**

Chemical Name	Carcinogen Status	Exposure limits
Acetic acid		Mexico: TWA 10 ppm Mexico: TWA 25 mg/m <sup>3</sup> Mexico: STEL 15 ppm Mexico: STEL 37 mg/m <sup>3</sup>

**WHMIS Note:**

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.

**16. OTHER INFORMATION**

**Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed H319 - Causes serious eye irritation H335 - May cause respiratory irritation H315 - Causes skin irritation H314 - Causes severe skin burns and eye damage H226 - Flammable liquid and vapor H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H317 - May cause an allergic skin reaction H318 - Causes serious eye damage

**Hazard statements**

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317 - May cause an allergic skin reaction

**Revision Date** 05-Aug-2016  
**Revision Note** No information available.

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of MSDS

# Safety Data Sheet

Issuing date no data available

Revision Date 05-Aug-2016

Version 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Lipid Droplets Assay Wash Solution

**UN/ID No** 3316

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
1 Kendall Square, Ste 341  
Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

**E-mail address** technical@abcam.com

**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Serious eye damage/eye irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Ozone	Not applicable
Flammable liquids	Category 2

### GHS Label elements, including precautionary statements



**Signal Word**  
Danger

**Hazard statements**

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H225 - Highly flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P312 - Call a POISON CENTER or doctor/ physician if you feel unwell

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P370 + P378 - In case of fire: Use foam for extinction

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ eye protection/ face protection

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P271 - Use only outdoors or in a well-ventilated area

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P233 - Keep container tightly closed

P403 + P235 - Store in a well-ventilated place. Keep cool

**Other information**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Isopropanol	67-63-0	60-99	STOT SE 3 (H336) Eye Irrit. 2 (H319) Flam Liq. 1 (H224)

**For the full text of the H-Statements mentioned in this Section, see Section 16**

#### 4. FIRST AID MEASURES

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. If symptoms persist, call a physician.
<b>Notes to physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Not flammable.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none.
<b>Sensitivity to Static Discharge</b>	none.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.
<b>Technical measures/Storage conditions</b>	Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Engineering measures** Showers  
Eyewash stations  
Ventilation systems

**Personal protective equipment**

**Eye/face protection** Tightly fitting safety goggles. Face-shield.  
**Skin and body protection** No special protective equipment required.  
**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures** When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	No information available.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	No information available
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available	<b>solubility</b>	No information available.
<b>Explosion limits</b>	No information available	<b>Vapor density</b>	no data available
<b>Specific Gravity</b>	no data available		
<b>Evaporation rate</b>	No information available		
<b>VOC Content(%)</b>	75		

**10. STABILITY AND REACTIVITY**

**Stability** Stable under recommended storage conditions.

**Incompatible products** None known based on information supplied.

**Conditions to avoid** None known based on information supplied.

**Hazardous decomposition products** None known based on information supplied.

**Hazardous polymerization** Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b>Product Information</b>	Irritating to skin, eyes and / or respiratory tract.
<b>Inhalation</b>	May cause irritation of respiratory tract
<b>Eye contact</b>	May cause irritation
<b>Skin contact</b>	May cause irritation
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropanol	4396 mg/kg ( Rat )	12800 mg/kg ( Rat ) 12870 mg/kg ( Rabbit )	72.6 mg/L ( Rat ) 4 h

### Chronic toxicity

**Chronic toxicity** Avoid repeated exposure

**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropanol		Group 1 Group 3		X

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**OSHA: (Occupational Safety & Health Administration)**

X - Present

**Target Organ Effects** Eyes. Respiratory system. Skin.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Isopropanol	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50		13299: 48 h Daphnia magna mg/L EC50
<b>Chemical Name</b>			<b>log Pow</b>	
Isopropanol			0.05	

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging** Do not re-use empty containers.

**California Hazardous Waste Codes** 561

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Isopropanol	Toxic Ignitable

**14. TRANSPORT INFORMATION**

**DOT** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**IATA** Excepted Quantity  
**UN/ID No** 3316  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**Packing group** II

**ADR** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropanol	67-63-0	75	1.0

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** yes  
**Chronic Health Hazard** no  
**Fire Hazard** no  
**Sudden Release of Pressure Hazard** no  
**Reactive Hazard** no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Isopropanol	X	X	X		X

**International Regulations**

Chemical Name	Carcinogen Status	Exposure limits
Isopropanol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m <sup>3</sup> Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m <sup>3</sup>

**WHMIS Note:**

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.

**16. OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H336 - May cause drowsiness or dizziness H319 - Causes serious eye irritation H224 - Extremely flammable liquid and vapor

**Hazard statements**

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H225 - Highly flammable liquid and vapor

**Revision Date** 05-Aug-2016

**Revision Note** No information available.

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of MSDS**



# Safety Data Sheet

Issuing date no data available

Revision Date 05-Aug-2016

Version 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Lipid Droplets Assay Oil Red O Solution

**UN/ID No** 3316

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
1 Kendall Square, Ste 341  
Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

**E-mail address** technical@abcam.com

**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Serious eye damage/eye irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Ozone	Not applicable
Flammable liquids	Category 2

### GHS Label elements, including precautionary statements



**Signal Word**  
Danger

**Hazard statements**

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H225 - Highly flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

P370 + P378 - In case of fire: Use foam for extinction

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor/ physician if you feel unwell

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ eye protection/ face protection

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P271 - Use only outdoors or in a well-ventilated area

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P233 - Keep container tightly closed

P403 + P235 - Store in a well-ventilated place. Keep cool

**Other information**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Isopropanol	67-63-0	100	STOT SE 3 (H336) Eye Irrit. 2 (H319) Flam Liq. 1 (H224)

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 4. FIRST AID MEASURES

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. If symptoms persist, call a physician.
<b>Notes to physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none.
<b>Sensitivity to Static Discharge</b>	none.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapors or spray mist.
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**Technical measures/Storage conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Engineering measures** Showers  
Eyewash stations  
Ventilation systems

**Personal protective equipment**

**Eye/face protection** Tightly fitting safety goggles. Face-shield.  
**Skin and body protection** No special protective equipment required.  
**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	No information available.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	No information available
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available	<b>solubility</b>	No information available.
<b>Explosion limits</b>	No information available	<b>Vapor density</b>	no data available
<b>Specific Gravity</b>	no data available		
<b>Evaporation rate</b>	No information available		
<b>VOC Content(%)</b>	100		

**10. STABILITY AND REACTIVITY**

**Stability** Stable under recommended storage conditions.

**Incompatible products** None known based on information supplied.

**Conditions to avoid** None known based on information supplied.

**Hazardous decomposition products** None known based on information supplied.

**Hazardous polymerization** Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b>Product Information</b>	Irritating to skin, eyes and / or respiratory tract.
<b>Inhalation</b>	May cause irritation of respiratory tract
<b>Eye contact</b>	May cause irritation
<b>Skin contact</b>	May cause irritation
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropanol	4396 mg/kg ( Rat )	12800 mg/kg ( Rat ) 12870 mg/kg ( Rabbit )	72.6 mg/L ( Rat ) 4 h

### Chronic toxicity

**Chronic toxicity** Avoid repeated exposure

**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropanol		Group 1 Group 3		X

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**OSHA: (Occupational Safety & Health Administration)**

X - Present

**Target Organ Effects** Eyes. Respiratory system. Skin.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Isopropanol	1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50		13299: 48 h <i>Daphnia magna</i> mg/L EC50
<b>Chemical Name</b>			<b>log Pow</b>	
Isopropanol			0.05	

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging** Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Isopropanol	Toxic Ignitable

### 14. TRANSPORT INFORMATION

**DOT** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**IATA** Excepted Quantity  
**UN/ID No** 3316  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**Packing group** II

**ADR** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

### 15. REGULATORY INFORMATION

#### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropanol	67-63-0	100	1.0

#### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	yes
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Isopropanol	X	X	X		X

**International Regulations**

Chemical Name	Carcinogen Status	Exposure limits
Isopropanol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m <sup>3</sup> Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m <sup>3</sup>

**WHMIS Note:**

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.

**16. OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H336 - May cause drowsiness or dizziness H319 - Causes serious eye irritation H224 - Extremely flammable liquid and vapor

**Hazard statements**

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H225 - Highly flammable liquid and vapor

**Revision Date** 05-Aug-2016

**Revision Note** No information available.

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of MSDS**

# Safety Data Sheet

Issuing date no data available

Revision Date 05-Aug-2016

Version 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Lipid Droplets Assay Dye Extraction Solution

**UN/ID No** 3316

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
1 Kendall Square, Ste 341  
Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

**E-mail address** technical@abcam.com

**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Serious eye damage/eye irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Ozone	Not applicable
Flammable liquids	Category 2

### GHS Label elements, including precautionary statements



**Signal Word**  
Danger



**Hazard statements**

H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation  
 H225 - Highly flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P312 - Call a POISON CENTER or doctor/ physician if you feel unwell  
 P337 + P313 - If eye irritation persists: Get medical advice/ attention  
 P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
 P370 + P378 - In case of fire: Use foam for extinction  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P280 - Wear protective gloves/ eye protection/ face protection  
 P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
 P271 - Use only outdoors or in a well-ventilated area  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P405 - Store locked up  
 P501 - Dispose of contents/ container to an approved waste disposal plant  
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P233 - Keep container tightly closed  
 P403 + P235 - Store in a well-ventilated place. Keep cool

**Other information**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Isopropanol	67-63-0	100	STOT SE 3 (H336) Eye Irrit. 2 (H319) Flam Liq. 1 (H224)

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 4. FIRST AID MEASURES

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. If symptoms persist, call a physician.
<b>Notes to physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none.
<b>Sensitivity to Static Discharge</b>	none.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapors or spray mist.
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**Technical measures/Storage conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Engineering measures** Showers  
Eyewash stations  
Ventilation systems

**Personal protective equipment**

**Eye/face protection** Tightly fitting safety goggles. Face-shield.  
**Skin and body protection** No special protective equipment required.  
**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	No information available.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	No information available
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available		
<b>Explosion limits</b>	No information available	<b>solubility</b>	No information available.
<b>Specific Gravity</b>	no data available	<b>Vapor density</b>	no data available
<b>Evaporation rate</b>	No information available		
<b>VOC Content(%)</b>	100		

**10. STABILITY AND REACTIVITY**

**Stability** Stable under recommended storage conditions.

**Incompatible products** None known based on information supplied.

**Conditions to avoid** None known based on information supplied.

**Hazardous decomposition products** None known based on information supplied.

**Hazardous polymerization** Hazardous polymerization does not occur.

**11. TOXICOLOGICAL INFORMATION**

Acute toxicity

**Product Information** Irritating to skin, eyes and / or respiratory tract.

**Inhalation** May cause irritation of respiratory tract

**Eye contact** May cause irritation

**Skin contact** May cause irritation

**Ingestion** Ingestion may cause irritation to mucous membranes

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropanol	4396 mg/kg ( Rat )	12800 mg/kg ( Rat ) 12870 mg/kg ( Rabbit )	72.6 mg/L ( Rat ) 4 h

Chronic toxicity

**Chronic toxicity** Avoid repeated exposure

**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropanol		Group 1 Group 3		X

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**OSHA: (Occupational Safety & Health Administration)**

X - Present

**Target Organ Effects** Eyes. Respiratory system. Skin.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Isopropanol	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50		13299: 48 h Daphnia magna mg/L EC50
<b>Chemical Name</b>		<b>log Pow</b>		
Isopropanol		0.05		

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging**

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Isopropanol	Toxic Ignitable

**14. TRANSPORT INFORMATION**

**DOT** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**IATA** Excepted Quantity  
**UN/ID No** 3316  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**Packing group** II

**ADR** Excepted Quantity  
**Proper shipping name** Chemical Kit  
**Hazard class** 9  
**UN/ID No** 3316  
**Packing group** II

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropanol	67-63-0	100	1.0

**SARA 311/312 Hazard Categories**

Acute Health Hazard	yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Isopropanol	X	X	X		X

**International Regulations**

Chemical Name	Carcinogen Status	Exposure limits
Isopropanol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m <sup>3</sup> Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m <sup>3</sup>

**WHMIS Note:**

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.

## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H336 - May cause drowsiness or dizziness H319 - Causes serious eye irritation H224 - Extremely flammable liquid and vapor

### Hazard statements

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H225 - Highly flammable liquid and vapor

**Revision Date** 05-Aug-2016

**Revision Note** No information available.

### Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of MSDS**