

## Safety Data Sheet

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### Identification of the substance or mixture

**Product code** TS-42799  
**Product name** AquaSil™ Siliconizing Fluid

#### Company/undertaking identification

Life Technologies Corporation  
5781 Van Allen Way  
PO Box 6482  
Carlsbad, CA 92008  
+1 760 603 7200

Life Technologies  
5250 Mainway Drive  
Burlington, ONT  
CANADA L7L 6A4  
800/263-6236

Thermo Fisher Scientific  
Pierce Biotechnology  
P.O. Box 117  
Rockford, IL 61105  
United States  
1.815.968.0747 or  
1.800.874.3723

**24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC** Within the USA + Canada: 1-800-424-9300 and 1-703-527-3887  
Outside the USA + Canada: 1-703-741-5970

**Country Specific Emergency Number (if available):**

**For research use only. Not for use in diagnostic procedures**

### SECTION 2: Hazards identification

#### GHS Classification

**Signal Word**  
DANGER

**Hazard pictograms**



**Health hazards**

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (STOT) – single exposure	Category 3

**Physical hazards**

GHS Physical Hazard	Flammable liquids
GHS Physical Hazard Category Number	Category 2

**Environmental hazards**

Not Hazardous

**Hazard Statements**

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

**Precautionary Statements**

**Prevention**

- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P271 - Use only outdoors or in a well-ventilated area
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 - Wash hands thoroughly after handling

**Response**

- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
- P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P337 + P313 - If eye irritation persists: Get medical advice/attention

**Storage**

- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
- P403 + P235 - Store in a well-ventilated place. Keep cool

**Disposal**

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

**Other hazards**

Not Applicable

**HMIS**

Health	2
Flammability	3

Reactivity	0
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**SECTION 3: Composition/information on ingredients**

Chemical Name	CAS No.	Common name	EINECS-No	Weight-%
Diacetone alcohol	123-42-2	-	204-626-7	25 - 45
Trimethoxyoctadecylsilane	3069-42-9	-	-	10-20
tert-Butyl alcohol	75-65-0	-	200-889-7	25-45

We recommend handling all chemicals with caution.

**SECTION 4: First aid measures**

**Description of first aid measures**

<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Notes to Physician</b>	Treat symptomatically.

**Most important symptoms and effects, both acute and delayed**

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

**Indication of any immediate medical attention and special treatment needed**

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

**SECTION 5: Firefighting measures**

**Extinguishing media**

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Unsuitable extinguishing media</b>	No information available.

**Special hazards arising from the substance or mixture**

None known

**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation  
Avoid contact with skin, eyes or clothing  
Use personal protection equipment  
See section 8 for more information

### Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

### Methods and material for containment and cleaning up

Soak up with inert absorbent material.

### Reference to other sections

See section 8 for more information.

## SECTION 7: Handling and storage

### Precautions for safe handling

Always wear recommended Personal Protective Equipment. See section 8 for more information. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

### Specific end use(s)

For research use only.

## SECTION 8: Exposure controls/personal protection

### Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Diacetone alcohol	50 ppm 240 mg/m <sup>3</sup>	None	50 ppm	None
Trimethoxyoctadecylsilane	None	None	None	None
tert-Butyl alcohol	100 ppm 300 mg/m <sup>3</sup>	None	100 ppm	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Diacetone alcohol	50 ppm	None	None
Trimethoxyoctadecylsilane	None	None	None
tert-Butyl alcohol	78 ppm 235 mg/m <sup>3</sup>	None	None

**Engineering Measures**      Ensure adequate ventilation, especially in confined areas.

### Exposure controls

#### Personal Protective Equipment

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<b>Respiratory protection</b>	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
<b>Hand protection</b>	Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.
<b>Eye protection</b>	Tight sealing safety goggles.
<b>Skin and Body Protection</b>	Wear suitable protective clothing.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Environmental exposure controls</b>	No special environmental precautions required.

SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

<b>Appearance</b>	liquid	
<b>Color</b>	amber	
<b>Odor</b>	characteristic	
<b>Odor Threshold</b>	No data	
<b>Molecular Weight</b>	No data	
<b>Melting point / melting range</b>	°C No data	°F No data
<b>Boiling point / boiling range</b>	°C 82	°F 179.6
<b>Flash point</b>	°C 10	°F 50
<b>Autoignition Temperature</b>	°C No data	°F No data
<b>Decomposition temperature</b>	°C No data	°F No data
<b>Evaporation rate</b>	<1 (butyl acetate = 1)	
<b>Flammability (solid, gas)</b>	Extremely flammable in the presence of open flames, sparks and static discharge and heat.	
<b>Upper explosion limit</b>	7	
<b>Lower explosion limit</b>	1	
<b>Vapor Pressure</b>	4.7 kPa (35 mm Hg) [room temperature]	
<b>Vapor density</b>	>1 [Air = 1]	
<b>Relative density</b>	0.9	
<b>Specific gravity</b>	No data	
<b>Solubility</b>	Soluble in water	
<b>Partition coefficient: n-octanol/water</b>	No data	
<b>Viscosity</b>	No data	
<b>Explosive properties</b>	No data	
<b>Oxidizing properties</b>	No data	
<b>Other information</b>	No data.	

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported.
<b>Conditions to avoid</b>	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
<b>Incompatible materials</b>	No dangerous reaction known under conditions of normal use.
<b>Hazardous decomposition products</b>	No known hazardous decomposition products.

## SECTION 11: Toxicological information

### Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Diacetone alcohol	> 4 g/kg (Rat)	No data available	>7.23g/m <sup>3</sup> (Rat)
Trimethoxyoctadecylsilane	No data available	No data available	No data available
tert-Butyl alcohol	= 2200 mg/kg (Rat)	No data available	>10000ppm(Rat)

### Principal Routes of Exposure

<b>Acute toxicity</b>	Data are conclusive but insufficient for classification.
<b>Skin corrosion/irritation</b>	Serious eye damage/eye irritation
<b>Serious eye damage/irritation</b>	Data are conclusive but insufficient for classification
<b>Respiratory or skin sensitization</b>	Data are conclusive but insufficient for classification
<b>Specific target organ toxicity (STOT) – single exposure</b>	May cause respiratory irritation
<b>Specific target organ toxicity (STOT) – repeated exposure</b>	Data are conclusive but insufficient for classification
<b>Carcinogenicity</b>	Data are conclusive but insufficient for classification
<b>Germ cell mutagenicity</b>	Data are conclusive but insufficient for classification
<b>Reproductive toxicity</b>	Data are conclusive but insufficient for classification
<b>Aspiration hazard</b>	Data are conclusive but insufficient for classification

## SECTION 12: Ecological information

### Ecotoxicity

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

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Diacetone alcohol	No data available	Daphnia magna EC50=8750 mg/L (24 h)	No data available	No data available	logPow1.03
Trimethoxyoctadecylsilane	No data available	No data available	No data available	No data available	No data available
tert-Butyl alcohol	Desmodesmus subspicatus EC50>1000 mg/L (72 h)	Daphnia magna EC504607 - 6577 mg/L (48 h) Daphnia magna EC50=933 mg/L (48 h)	No data available	No data available	logPow0.35

**Mobility in soil** No information available.

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations

## SECTION 14: Transport information

### IATA / ADR / DOT-US / IMDG

Classified as dangerous in the meaning of transport regulations

<b>UN number</b>	1993
<b>UN proper shipping name</b>	Flammable liquids, n.o.s.(2-Methylpropan-2-ol, 4-Hydroxy-4-Methylpentan-2-one)
<b>Transport hazard class(es)</b>	3
<b>Packing group</b>	II

### Environmental hazards

Not Applicable

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**Special precautions for user**

Not Applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not Applicable.

## SECTION 15: Regulatory information

Component	US TSCA
Diacetone alcohol 123-42-2 ( 25 - 45 )	Listed
Trimethoxyoctadecylsilane 3069-42-9 ( 10-20 )	Listed
tert-Butyl alcohol 75-65-0 ( 25-45 )	Listed

**US Federal Regulations****SARA 313**

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers.

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>SARA 313 - Threshold Values</u>
tert-Butyl alcohol	75-65-0	25-45	1.0

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain HAPs

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class**

B2 - Flammable liquid

D2B - Toxic materials

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

**National Regulations - Brazil**

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Brazil - National Agency for Sanitary Surveillance (ANVISA)</u>	<u>Brazil - National List of Carcinogen Agents to Humans (LINACH)</u>
Diacetone alcohol	123-42-2	Not Listed	Not Listed
Trimethoxyoctadecylsilane	3069-42-9	Not Listed	Not Listed

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tert-Butyl alcohol	75-65-0	Not Listed	Not Listed
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## SECTION 16: Other information

**Reason for revision**                      SDS sections updated.  
**Revision number**                         2  
**Revision date**                             30-Jun-2020

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### References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

### Abbreviations and acronyms

**TWA** - Time-Weighted Average  
**OELs** - Occupational Exposure Limits  
**STEL** - Short Term Exposure Limit  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**CEPA** - Canadian Environmental Protection Act  
**EPA** - Environmental Protection Agency  
**OSHA** - Occupational Safety and Health Administration of the US Department of Labor  
**IATA** - International Air Transport Association  
**DOT** - Department of Transportation  
**IMDG** - International Maritime Dangerous Goods  
**ACGIH** - American Conference of Governmental Industrial Hygienists  
**NIOSH** - National Institute for Occupational Safety and Health  
**AIHA** - American Industrial Hygiene Association  
**HMIS** - Department of Defense Hazardous Materials Information System  
**NTP** - National Toxicology Program  
**IARC** - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

**End of Safety Data Sheet**

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