

U-100



SAFETY DATA SHEET  
(SDS)

IMPORTANT SAFETY INFORMATION - DO NOT DISCARD  
PLEASE ROUTE TO COMPANY SAFETY OFFICER

STERLING SPECIALTY  
9201 W 21ST STREET  
SAND SPRINGS , OK 74063  
HI0851114 - PO# 4500224205  
PAUL PHAM

STERLING SPECIALTY  
9201 W 21ST STREET  
SAND SPRINGS ,OK 74063

Fisher Scientific provides SDSs in compliance with the Globally Harmonized Standard or GHS requirements as adopted by OSHA, CFR 29, 1910.1200. The Hazard Communication Standard requires all manufacturers to provide up to date SDSs to customers. SDSs are also available on [www.FisherSci.com](http://www.FisherSci.com).

We are "Going Green." We are asking all customers to complete the information below to have product SDSs emailed to your company. If you have not already signed up, please make this commitment today! We thank you, the environment thanks you, and the trees thank you! Do you know it takes about 6% of a tree to make one ream of paper (500 sheets)?

Please consider the environment - go GREEN

Sign up to receive your SDSs via EMAIL today!  
Update your contact information below:

Account Number: \_\_\_\_\_  
SDS E-Mailing Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Fax Number: \_\_\_\_\_

If you have any additional changes for the contact person or address corrections, please send them to [EMSDS.RA@thermofisher.com](mailto:EMSDS.RA@thermofisher.com) or FAX to: **412-490-8098**

REQUIRED SAFETY DATA SHEETS (SDS) NOT INCLUDED IN THIS MAILING WILL FOLLOW UNDER SEPARATE COVER. THIS PACKET MAY CONTAIN SDSs FOR PRODUCTS MANUFACTURED BY OTHER COMPANIES AND DISTRIBUTED BY FISHER SCIENTIFIC. THESE SDSs WERE PREPARED BY THE MANUFACTURER AND FISHER SCIENTIFIC DISCLAIMS ALL LIABILITY FOR THEIR CONTENT.

IF YOU REQUIRE ADDITIONAL SDS INFORMATION, PLEASE VISIT OUR WEBSITE:

[www.fishersci.com](http://www.fishersci.com)

MSDS enclosed for:

Product ID	Product name
FSHT324	Toluene
FSHAC12420	Hydrochloric acid, 0.1 N standard solution
FSHAL2100	Aquamine™ Solvent

**SAFETY DATA SHEET**

Creation Date 11-Jun-2009

Revision Date 17-Jan-2018

Revision Number 4

**1. Identification**

**Product Name** Toluene

**Cat No. :** T324-1; T324-4; T324-20; T324-200; T324-500; T324CU-1300;  
T324FB-19; T324FB-50; T324FB-115; T324FB-200; T324POP-200;  
T324POPB-200; T324RB-19; T324RB-115; T324RB-200; T324RS-19;  
T324RS-28; T324RS-50; T324RS-115; T324RS-200; T324S-4;  
T324SK-4; T324SS-28; T324SS-50; T324SS-115; T324SS-200

**CAS-No** 108-88-3  
**Synonyms** Tol; Methylbenzene

**Recommended Use** Laboratory chemicals,  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

**Details of the supplier of the safety data sheet**

**Company**  
Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number**  
CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

**2. Hazard(s) identification**

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

Flammable liquids	Category 2
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system, Central nervous system (CNS).	Category 3
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Kidney, Liver, spleen, Blood.	Category 2
Aspiration Toxicity	Category 1

**Label Elements**

**Signal Word**  
Danger

**Hazard Statements**  
Highly flammable liquid and vapor

**Toluene**

Revision Date 17-Jan-2018

May be fatal if swallowed and enters airways  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
May cause drowsiness or dizziness  
Suspected of damaging the unborn child  
Causes damage to organs through prolonged or repeated exposure



**Precautionary Statements**

**Prevention**  
Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

**Response**  
If exposed or concerned: Get medical attention/advice

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

**Skin**  
If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

**Eyes**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Ingestion**  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

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

**Storage**  
Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Disposal**  
Dispose of contents/container to an approved waste disposal plant  
**Hazards not otherwise classified (HNOC)**

**WARNING:** Reproductive Harm - <https://www.p65warnings.ca.gov/>

### 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Toluene	108-98-3	>95

### 4. First-aid measures

#### General Advice

If symptoms persist, call a physician.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

#### Inhalation

Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. Risk of serious damage to the lungs.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Call a physician or Poison Control Center immediately. If vomiting occurs naturally, have victim lean forward.

**Most important symptoms and effects**  
Breathing difficulties. Causes central nervous system depression: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

#### Notes to Physician

Treat symptomatically

### 5. Fire-fighting measures

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

**Unsuitable Extinguishing Media**  
No information available

**Flash Point**  
4 °C / 39.2 °F

**Method -**  
No information available

**Autoignition Temperature**  
535 °C / 995 °F

#### Explosion Limits

Upper 7.1 vol %  
Lower 1.1 vol %

**Oxidizing Properties**  
Not oxidising

**Sensitivity to Mechanical Impact** No information available  
**Sensitivity to Static Discharge** No information available

#### Specific Hazards Arising from the Chemical

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

#### Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)  
**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NEPA

Health  
3

Flammability  
3

Instability  
0

Physical hazards  
N/A

### 6. Accidental release measures

#### Personal Precautions

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

#### Environmental Precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up**  
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 7. Handling and storage

#### Handling

Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

#### Storage

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

### 8. Exposure controls / personal protection

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Toluene	TWA: 20 ppm	(Vacated) TWA: 100 ppm (Vacated) TWA: 375 mg/m <sup>3</sup> Ceiling: 300 ppm (Vacated) STEL: 150 ppm (Vacated) STEL: 560 mg/m <sup>3</sup> TWA: 200 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup>

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists  
OSHA - Occupational Safety and Health Administration  
NIOSH IDLH: The National Institute for Occupational Safety and Health *Immediately Dangerous to Life or Health*

#### Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure adequate ventilation, especially in confined areas.

#### Personal Protective Equipment

##### Eyeface Protection

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

##### Skin and body protection

Long sleeved clothing.

##### Respiratory Protection

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

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

Physical State	Liquid
Appearance	Colorless
Odor	aromatic
Odor Threshold	1.74 ppm
pH	Not applicable
Melting Point/Range	-95 °C / -139 °F
Boiling Point/Range	111 °C / 231.8 °F @ 760 mmHg
Flash Point	4 °C / 39.2 °F
Evaporation Rate	2.4 (Butyl acetate = 1.0)
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	7.1 vol %
Lower	1.1 vol %
Vapor Pressure	29 mbar @ 20 °C
Vapor Density	3.1
Specific Gravity	0.866
Solubility	Insoluble in water
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	535 °C / 995 °F
Decomposition Temperature	No information available
Viscosity	0.6 mPa.s @ 20 °C
Molecular Formula	C7 H8
Molecular Weight	92.14

**10. Stability and reactivity**

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products: Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	Strong oxidizing agents, Strong acids, Strong bases, Halogenated compounds
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

**11. Toxicological information**

<b>Acute Toxicity</b>		
<b>Product Information</b>		
<b>Component Information</b>		
Component Toluene	LD50 Oral > 5000 mg/kg ( Rat )	LD50 Dermal LD50 = 12000 mg/kg ( Rabbit )
		LC50 Inhalation 26700 ppm ( Rat ) 1 h
<b>Toxicologically Synergistic Products</b>		
Delayed and immediate effects as well as chronic effects from short and long-term exposure.		
<b>Irritation</b>	Irritating to eyes, respiratory system and skin	
<b>Sensitization</b>	No information available	
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.	

Component Toluene	CAS-No 108-88-3	IARC Not listed	NTP Not listed	ACGIH Not listed	OSHA Not listed	Mexico Not listed
<b>Mutagenic Effects</b>						
Not mutagenic in AMES Test						
<b>Reproductive Effects</b>						
Experiments have shown reproductive toxicity effects on laboratory animals.						
<b>Developmental Effects</b>						
Developmental effects have occurred in experimental animals.						
<b>Teratogenicity</b>						
Possible risk of harm to the unborn child.						
<b>STOT - single exposure</b>						
Respiratory system Central nervous system (CNS)						
<b>STOT - repeated exposure</b>						
Kidney Liver spleen Blood						
<b>Aspiration hazard</b>						
No information available						
<b>Symptoms / effects, both acute and delayed</b>						
Causes central nervous system depression; Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting						
<b>Endocrine Disruptor Information</b>						
No information available						
<b>Other Adverse Effects</b>						
The toxicological properties have not been fully investigated.						

**12. Ecological information**

**Ecotoxicity.** Contains a substance which is.: The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Toluene	EC50 = 12.5 mg/L, 72h static (Pseudokirchneriella subcapitata) EC50: > 433 mg/L, 96h (Pseudokirchneriella subcapitata)	50-70 mg/L LC50 96 h 5-7 mg/L LC50 96 h 15-19 mg/L LC50 96 h 28 mg/L LC50 96 h 12 mg/L LC50 96 h	EC50 = 19.7 mg/L 30 min	EC50: = 11.5 mg/L, 48h (Daphnia magna) EC50: 5.46 - 9.83 mg/L, 48h Static (Daphnia magna)

**Persistence and Degradability** Soluble in water. Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Toluene	2.7

**13. Disposal considerations**

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

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

**14. Transport information**

DOT	
UN-No	UN1294
Proper Shipping Name	TOLUENE
Hazard Class	3
Packing Group	II
TDG.	

Toluene

Revision Date 17-Jan-2018

UN-No	UN1294
Proper Shipping Name	TOLUENE
Hazard Class	3
Packing Group	II
IATA	
UN-No	UN1294
Proper Shipping Name	TOLUENE
Hazard Class	II
Packing Group	3
IMDGI/MO	UN1294
UN-No	TOLUENE
Proper Shipping Name	
Hazard Class	3
Packing Group	II

**15. Regulatory Information**

All of the components in the product are on the following Inventory lists: X = listed

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Toluene	X	X	-	203-625-9	-	-	X	X	X	X	X

- X - Listed
- E - Indicates a substance that is the subject of a Section 5(a) Consent order under TSCA.
- F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - Indicates a commercial PNM substance.
- R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - Indicates a substance that is identified in a proposed or final Significant New Use Rule.
- T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(f)).
- Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

TSCA 12(b) Not applicable

SARA 313	Component	CAS-No	Weight %	SARA 313 - Threshold Values %
	Toluene	108-88-3	>95	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
	Toluene	X	1000 lb	X

Clean Air Act	Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
	Toluene	X		

OSHA Occupational Safety and Health Administration  
Not applicable

Toluene

Revision Date 17-Jan-2018

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

Component	Hazardous Substances HOS	CERCLA EHS HOS			
Toluene	1000 lb 1 lb	-			
California Proposition 65 This product contains the following proposition 65 chemicals					
Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category	
Toluene	108-88-3	Developmental	-	Developmental	
U.S. State Right-to-Know Regulations					
Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Toluene	X	X	X	X	X

**U.S. Department of Transportation**

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

**U.S. Department of Homeland Security**  
This product does not contain any DHS chemicals.

**Other International Regulations**

Mexico - Grade Serious risk, Grade 3

**16. Other Information**

Prepared By Regulatory Affairs  
 Tiernno Fisher Scientific  
 Email: EMSDS\_RA@thermofisher.com

Creation Date 11-Jun-2009  
 Revision Date 17-Jan-2018  
 Print Date 17-Jan-2018

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**  
The information provided 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 SDS**

**SAFETY DATA SHEET**

Creation Date 06-Aug-2010

Revision Date 25-Apr-2019

Revision Number 6

**1. Identification**

**Product Name** Hydrochloric acid, 0.1 N standard solution

**Cat No. :** AC124200000; AC124200010; AC124200025; AC124200100;  
AC124200250

**Synonyms** Chlorohydric acid; Muriatic acid

**Recommended Use** Laboratory chemicals;  
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet:**

**Company:**  
Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
**Emergency Number US:**001-201-796-7100 / **Europe:** +32 14 57 52 99  
**CHEMTREC** Tel: No **US:**001-800-424-9300 / **Europe:**001-703-527-3887

**2. Hazard(s) Identification**

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

Corrosive to metals	Category 1
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

**Label Elements**

**Signal Word** Warning

**Hazard Statements**

May be corrosive to metals  
Causes skin irritation  
Causes serious eye irritation

Hydrochloric acid, 0.1 N standard solution

Revision Date 25-Apr-2019



**Precautionary Statements**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep only in original container.

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs, Get medical advice/attention

Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Spills**

Absorb spillage to prevent material damage

**Storage**

Store in corrosive resistant polypropylene container with a resistant liner

**Hazards not otherwise classified (HNOC)**

None identified

**3. Composition/Information on Ingredients**

Component	CAS-No	Weight %
Water	7732-18-5	>99
Hydrochloric acid	7647-01-0	<1

**4. First-aid measures**

**Eye Contact**  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact**  
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

**Inhalation**  
Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.

**Ingestion**  
Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects**  
No information available.

**Notes to Physician**  
Treat symptomatically

**5. Fire-fighting measures**

**Suitable Extinguishing Media**  
Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

**Unsuitable Extinguishing Media**  
No information available

<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	No data available
Upper	No data available
Lower	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. None reasonably foreseeable.

**Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>NEPA</b>	<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
	2	0	0	N/A

**6. Accidental release measures**

**Personal Precautions**  
Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Should not be released into the environment. See Section 12 for additional Ecological Information.

**Environmental Precautions**

**Methods for Containment and Clean Soak up** with inert absorbent material. Keep in suitable, closed containers for disposal.

**7. Handling and storage**

**Handling**  
Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Wash hands before breaks and immediately after handling the product.

**Storage**  
Keep containers tightly closed in a dry, cool and well-ventilated place.

**8. Exposure controls / personal protection**

Exposure Guidelines				
Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TVA)
Hydrochloric acid	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup> (Vacated) Ceiling: 5 ppm (Vacated) Ceiling: 7 mg/m <sup>3</sup>	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>	Ceiling: 2 ppm

**Legend**

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH - NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

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

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

**Respiratory Protection**

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

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Colorless
<b>Odor</b>	pungent
<b>Odor Threshold</b>	No information available
<b>pH</b>	< 2
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	100 °C / 212 °F
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability or explosive limits</b>	Not applicable
Upper	
Lower	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	14 mmHg @20°C
<b>Specific Gravity</b>	No information available
1,000	
<b>Solubility</b>	No information available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	No information available
<b>Molecular Formula</b>	HCl
<b>Molecular Weight</b>	36.46

**10. Stability and reactivity**

**Reactive Hazard**

None known, based on information available

**Stability**

Stable under normal conditions.

**Conditions to Avoid**

Incompatible products: Excess heat.

**Incompatible Materials**

Strong oxidizing agents, Metals

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas

**Hazardous Polymerization**

Hazardous polymerization does not occur.

**Hazardous Reactions**

None under normal processing.

**11. Toxicological information**

**Acute Toxicity**

No acute toxicity information is available for this product

Component Information	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Hydrochloric acid	238 - 277 mg/Kg ( Rat )	> 501.0 mg/Kg ( Rabbit )	1.68 mg/L ( Rat ) 1 h

Toxicologically Synergistic No information available  
 Delayed and immediate effects as well as chronic effects from short and long-term exposure.

Irritation May cause skin, eye, and respiratory tract irritation

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Hydrochloric acid	7647-01-0	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

### 12. Ecological information

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Fleas
Hydrochloric acid	-	282 mg/L LC50 96 h Gambusia affinis mg/L LC50 48 h Leuciscus idus	-	56mg/L EC50 72h Daphnia

Persistence and Degradability Miscible with water. Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

### 13. Disposal considerations

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

### 14. Transport information

DOT	
UN-No	UN1789
Proper Shipping Name	HYDROCHLORIC ACID SOLUTION
Hazard Class	8
Packing Group	III
TDG	
UN-No	UN1789
Proper Shipping Name	HYDROCHLORIC ACID SOLUTION
Hazard Class	8
Packing Group	III
LATA	
UN-No	UN1789
Proper Shipping Name	HYDROCHLORIC ACID SOLUTION
Hazard Class	8
Packing Group	III
IMDG/IMD	
UN-No	UN1789
Proper Shipping Name	HYDROCHLORIC ACID SOLUTION
Hazard Class	8
Packing Group	III

### 15. Regulatory information

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Water	7732-18-5	X	ACTIVE	-
Hydrochloric acid	7647-01-0	X	ACTIVE	-

Legend:  
 TSCA - Toxic Substances Control Act, (40 CFR Part 710)  
 X - Listed  
 - - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories  
 Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSO), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSO	KECL
Water	7732-18-5	X	-	231-791-2	X	X	X	X	KE-95400
Hydrochloric acid	7647-01-0	X	-	231-595-7	X	X	X	X	KE-20189

### U.S. Federal Regulations

SARA 313	Component	CAS-No	Weight %	SARA 313 - Threshold Values %
	Hydrochloric acid	7647-01-0	<1	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)	Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
	Hydrochloric acid	X	5000 lb	-	-

Clean Air Act			
Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Hydrochloric acid	X		

OSHA - Occupational Safety and Health Administration Not applicable

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Hydrochloric acid		TOX: 5000 lb

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

Component	Hazardous Substances RQs	CERCLA EHS RQs
Hydrochloric acid	5000 lb	5000 lb

California Proposition 65 This product does not contain any Proposition 65 chemicals.

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

Regulations Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Hydrochloric acid	X	X	X	X	X

U.S. Department of Transportation Reportable Quantity (RQ):  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product contains the following DHS chemicals:  
 Legend - STOs = Screening Threshold Quantities, APA = A placarded amount

Component	DHS Chemical Facility Anti-Terrorism Standard
Hydrochloric acid	Release STOs - 15000lb (concentration >=37%) Release STOs - 5000lb (anhydrous) Theft STOs - 500lb (anhydrous)

**Other International Regulations**

Mexico - Grade No information available

**16. Other information**

Prepared By Regulatory Affairs  
 Thermo Fisher Scientific  
 Email: EMSDS\_RA@thermofisher.com

Creation Date 06-Aug-2010  
 Revision Date 25-Apr-2019  
 Print Date 25-Apr-2019  
 Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). SDS sections updated: 2.

**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 SDS

**SAFETY DATA SHEET**

Creation Date 26-Apr-2010

Revision Date 24-Oct-2017

Revision Number 1

**1. Identification**

**Product Name**

**Aqualine™ Solvent**

**Cat No. :**

**AL2100-1; AL2100-212**

**Synonyms**

No information available

**Recommended Use**

Laboratory chemicals;  
Food, drug, pesticide or biocidal product use.

**Uses advised against**

**Details of the supplier of the safety data sheet**

**Company:**  
Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

**2. Hazard(s) identification**

**Classification**

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

Flammable liquids	Category 2
Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1 B
Reproductive Toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Target Organs - Central nervous system (CNS), Respiratory system, Optic nerve.	
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Lungs.	

**Label Elements**

**Signal Word**  
Danger

**Aqualine™ Solvent**

Revision Date 24-Oct-2017

**Hazard Statements**

Highly flammable liquid and vapor  
Causes severe skin burns and eye damage  
May cause respiratory irritation  
May damage the unborn child  
Causes damage to organs  
Causes damage to organs through prolonged or repeated exposure  
Toxic if swallowed, in contact with skin or if inhaled



**Precautionary Statements**

**Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

**Response**

Immediately call a POISON CENTER or doctor/physician

**Inhalation**

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

**Skin**

Wash contaminated clothing before reuse

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

**Eyes**

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

**Ingestion**

Rinse mouth

Do NOT induce vomiting

**Fire**

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

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other hazards**

Poison, may be fatal or cause blindness if swallowed, Vapor harmful, CANNOT BE MADE NON-POISONOUS.  
WARNING: Reproductive Harm - <https://www.p65warnings.ca.gov/>.

**3. Composition/Information on Ingredients**

Component	CAS-No	Weight %
Methyl alcohol	67-56-1	79.53
1-Imidazole	288-32-4	10-13
Sulfur dioxide	7446-09-5	5.5-8

**4. First-aid measures**

**Eye Contact**  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact**  
Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation**  
Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.

**Ingestion**  
Do NOT induce vomiting. Call a physician or poison control center immediately.

**Most important symptoms and effects**  
Difficulty in breathing. Causes burns by all exposure routes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting; Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Treat symptomatically

**Notes to Physician**

**5. Fire-fighting measures**

**Suitable Extinguishing Media**  
Dry chemical, CO<sub>2</sub> or water spray. Water mist may be used to cool closed containers.

**Unsuitable Extinguishing Media**  
No information available

**Flash Point**  
> 11 °C / > 51.8 °F

**Method -**  
No information available

**Autoignition Temperature**  
464 °C / 867.2 °F

**Explosion Limits**  
No data available

**Upper**  
No data available

**Lower**  
No data available

**Sensitivity to Static Discharge**  
No information available

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition. Vapors may form explosive mixtures with air. Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Vapors may travel to source of ignition and flash back. May be ignited by heat, sparks or flames. Containers may explode when heated. Flammable. Vapors may form explosive mixtures with air.

**Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NOx), Sulfur oxides, Formaldehyde.

**Protective Equipment and Precautions for Firefighters**

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

**NFPA**

**Health**

**Flammability**

**Instability**

**Physical hazards**

3

3

0

N/A

**Personal Precautions**

**6. Accidental release measures**  
Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation. Should not be released into the environment. Prevent product from entering drains. See Section 12 for additional Ecological Information.

**Environmental Precautions**

**Methods for Containment and Clean Up**  
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

**Handling**

**Handling**

**7. Handling and storage**

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. Take precautionary measures against static discharges. Wash hands before breaks and immediately after handling the product. Keep container tightly closed. Empty containers retain product residue. (liquid and/or vapor), and can be dangerous. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame. Protect from direct sunlight. Keep only in the original container. Corrosives area.

**8. Exposure controls / personal protection**

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 250 mg/m <sup>3</sup> (Vacated) STEL: 250 mg/m <sup>3</sup> (Vacated) STEL: 325 mg/m <sup>3</sup> Skin	IDLH: 6000 ppm TWA: 200 ppm STEL: 250 ppm STEL: 250 ppm	TWA: 200 ppm STEL: 250 ppm
Sulfur dioxide	STEL: 0.25 ppm	(Vacated) TWA: 200 ppm (Vacated) TWA: 5 mg/m <sup>3</sup> (Vacated) STEL: 15 mg/m <sup>3</sup> TWA: 5 ppm TWA: 13 mg/m <sup>3</sup>	IDLH: 100 ppm TWA: 2 ppm STEL: 5 ppm STEL: 13 mg/m <sup>3</sup>	STEL: 0.25 ppm

*Legend*

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH - NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures**

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

**Personal Protective Equipment**

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

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

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

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Colorless
<b>Odor</b>	Alcohol-like, sulfurous Odor
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	> 11 °C / > 51.8 °F
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid gas)</b>	Not applicable
<b>Flammability or explosive limits</b>	
Upper	No data available
Lower	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	> 1.0
<b>Specific Gravity</b>	0.88
<b>Solubility</b>	Slightly soluble in water
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	464 °C / 867.2 °F
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	No information available

**10. Stability and reactivity**

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

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

**Incompatible Materials** Incompatible with oxidizing agents, Strong acids, Alkaline, Bases, halocarbons, Butyl rubber, Metals

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Sulfur oxides, Formaldehyde

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

**Hazardous Reactions** None under normal processing.

**11. Toxicological information**

**Acute Toxicity**

**Product Information**

**Oral LD50** Category 3, ATE = 50 - 300 mg/kg.  
**Dermal LD50** Category 3, ATE = 200 - 1000 mg/kg.  
**Vapor LC50** Based on ATE data, the classification criteria are not met. ATE > 20 mg/l, Category 3, ATE = 2 - 10 mg/l.

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl alcohol	LD50 > 1187 - 2769 mg/kg ( Rat )	LD50 = 17100 mg/kg ( Rabbit )	LC50 = 128.2 mg/L ( Rat ) 4 h
1-Imidazole	970 mg/kg (Rat)	Not listed	Per CGA P-20: 2500 ppm/1hr ( Rat )
Sulfur dioxide	Not listed	Not listed	

**Toxicologically Synergistic Products**

Delayed and immediate effects as well as chronic effects from short and long-term exposure. No information available

**Irritation** Causes severe irritation and/or burns

**Sensitization** No information available

**Carcinogenicity**

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed
1-Imidazole	288-32-4	Not listed	Not listed	Not listed	Not listed	Not listed
Sulfur dioxide	7446-09-5	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects**

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

**STOT - single exposure** Central nervous system (CNS) Respiratory system Optic nerve

**STOT - repeated exposure** Lungs

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**12. Ecological information****Ecotoxicity**

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Methyl alcohol	Not listed	Pinheiroates promelas LC50 > 10000 mg/L 96h	EC50 = 35000 mg/L 25 min EC50 = 40000 mg/L 15 min	EC50 > 10000 mg/L 24h
1-Imidazole	EC50: = 82 mg/L, 96h (subspecius) EC50: = 130 mg/L, 72h (Desmodesmus)	Not listed	EC50 = 1200 mg/L EC50 = 231 mg/L, EC50 Pseudomonas putida 17 h EC50 = 43000 mg/L 5 min Phorbacterium phosphotolium 30 min	EC50 = 341.5 mg/L, 48h (Daphnia magna)

subspec(s)		
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**Persistence and Degradability** May persist based on information available.  
**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Methyl alcohol	-0.74
1-Imidazole	-0.02

**13. Disposal considerations**

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

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methyl alcohol - 67-56-1	U154	-

**14. Transport information**

**DOT**

**UN-No** UN3286  
**Proper Shipping Name** Flammable liquid, toxic, corrosive, n.o.s.  
**Technical Name** Methyl alcohol, 1-imidazole  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1, 8  
**Packing Group** II

**TDG**  
**UN-No** UN3286  
**Proper Shipping Name** Flammable liquid, toxic, corrosive, n.o.s.  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1, 8  
**Packing Group** II

**IATA**  
**UN-No** UN3286  
**Proper Shipping Name** Flammable liquid, toxic, corrosive, n.o.s.  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1, 8  
**Packing Group** II

**MDD/IMO**  
**UN-No** UN3286  
**Proper Shipping Name** Flammable liquid, toxic, corrosive, n.o.s.  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1, 8  
**Packing Group** II

**15. Regulatory information**

**United States of America Inventory**

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Methyl alcohol	67-56-1	X	X	ACTIVE
1-Imidazole	288-32-4	X	X	ACTIVE
Sulfur dioxide	7446-09-5	X	X	ACTIVE

Legend:  
 TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed  
 - - Not Listed  
**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Component	CAS-No	DSL	NDSL	ENECS	PICCS	ENCS	AICS	IECSC	KECI
Methyl alcohol	67-56-1	X	-	X	X	X	X	X	KE-23193
1-Imidazole	288-32-4	X	-	X	X	X	X	X	KE-20937
Sulfur dioxide	7446-09-5	X	-	X	X	X	X	X	KE-32567

**U.S. Federal Regulations**

SARA 313 Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Methyl alcohol	67-56-1	79.83	1.0

**SARA 311/312 Hazard Categories** See section 2 for more information  
**CWA (Clean Water Act)** Not applicable

Clean Air Act Component	HAPS Data	Class 1 Ozone Depleters	Class 2 Ozone Depleters
Methyl alcohol	X		

CERCLA Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Sulfur dioxide	-	TC: 1000 lb

Component	Hazardous Substances RQS	CERCLA EHS RQS
Methyl alcohol	5000 lb	
Sulfur dioxide	-	500 lb

**California Proposition 65** This product contains the following Proposition 65 chemicals.

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Methyl alcohol	67-56-1	Developmental	-	Developmental
Sulfur dioxide	7446-09-5	Developmental	-	Developmental

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

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methyl alcohol	X	X	X	X	X
Sulfur dioxide	X	X	X	-	X

**U.S. Department of Transportation** Y  
 Reportable Quantity (RQ): N  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product contains the following DHS chemicals:  
 Legend - STOs = Screening Threshold Quantities, APA = A placarded amount

Component	DHS Chemical Facility Anti-Terrorism Standard

Sulfur dioxide	Release STOs - 5000lb (anhydrous) Theft STOs - 500lb (anhydrous)
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Other International Regulations

Mexico - Grade No information available

**16. Other information**

Prepared By

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

Creation Date

26-Apr-2010

Revision Date

24-Oct-2017

Print Date

24-Oct-2017

Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided 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 SDS**

