# SAFETY DATA SHEET

Revision date 29-April-2022

1. Identification		
Product identifier		
Product Name	FORMALDEHYDE, 37 PERCENT, SOLUTION, USP	
Other means of identification		
Product Code(s)	FO110	
UN/ID no	UN1198	
Synonyms	None	
Recommended use of the chemical and restrictions on use		
Recommended use	No information available	
Restrictions on use	No information available	
Details of the supplier of the safety data sheet		
<u>Supplier Address</u> Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000		
Emergency telephone number		

**Emergency Telephone** 

Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

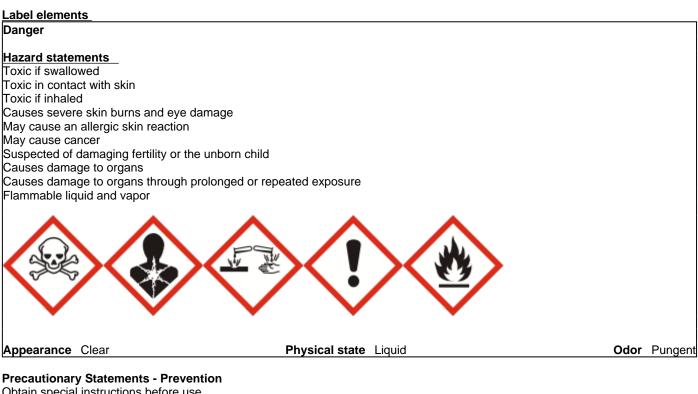
### **Classification**

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1A
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 3

Hazards not otherwise classified (HNOC)



Revision Number 3



Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection 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 Contaminated work clothing must not be allowed out of the workplace Do not breathe dust/fume/gas/mist/vapors/spray Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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

### **Precautionary Statements - Response**

Specific treatment (see .? on this label) Immediately call a POISON CENTER or doctor Specific treatment (see .? on this label) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor Call a POISON CENTER or doctor if you feel unwell IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse If skin irritation or rash occurs: Get medical advice/attention IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTER or doctor IF SWALLOWED: Immediately call a POISON CENTER or doctor Rinse mouth Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam to extinguish

### Precautionary Statements - Storage

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

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### Unknown acute toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

### Other information

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

# 3. Composition/information on ingredients

### Substance

Not applicable.

### <u>Mixture</u>

Chemical name	CAS No	Weight-%	Trade secret
Water	7732-18-5	47.0 - 53.5	*
Formaldehyde	50-00-0	34.5 - 38.0	*
Methyl Alcohol	67-56-1	9.0 - 15.0	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

breathing.

### 4. First-aid measures

### Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.	
Inhalation	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. 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. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention. Immediate medical attention is required.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention. Remove contact lenses, if present and easy to do. Continue rinsing.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin reaction.	
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.	
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. 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. Do not breathe vapor or mist.	
Most important symptoms and effects, both acute and delayed		
Symptoms	Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in	

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

Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause	
	sensitization in susceptible persons. Treat symptomatically.	

# 5. Fire-fighting measures

Suitable Extinguishing Media Large Fire	Dry chemical. Carbon dioxide (CO2). water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the chemical	risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.	
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO2).	
Explosion data Sensitivity to mechanical impact none.		
Sensitivity to static discharge	yes.	
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	

# 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Attention! Corrosive material. Do not breathe vapor or mist.		
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.		
Methods and material for containment and cleaning up			
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.		
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.		

# 7. Handling and storage

Advice on safe handling	Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Do not breathe vapor or mist.	
Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from	

Storage ConditionsKeep containers tightly closed in a dry, cool and well-ventilated place. Keep away from<br/>heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static<br/>electricity). Keep in properly labeled containers. Do not store near combustible materials.<br/>Keep in an area equipped with sprinklers. Store in accordance with the particular national<br/>regulations. Store in accordance with local regulations. Keep out of the reach of children.<br/>Store locked up. Protect from moisture. Store away from other materials.

# 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** 

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Formaldehyde 50-00-0	No data available	0.75 ppm TWA 2 ppm STEL	20 ppm IDLH
Methyl Alcohol 67-56-1	No data available	200 ppm TWA 260 mg/m <sup>3</sup> TWA	-

### Appropriate engineering controls

Engineering controls	Showers	
	Eyewash stations	
	Ventilation systems.	

### Individual protection measures, such as personal protective equipment

individual protection measures, such as personal protective equipment		
Eye/face protection	Tight sealing safety goggles. Face protection shield.	
Hand protection	Wear suitable gloves. Impervious gloves.	
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
General hygiene considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist.	

# 9. Physical and chemical properties

Information on basic physical and chemical properties			
Physical state	Liquid		
Appearance	Clear		
Color	Colorless		
Odor	Pungent		
Odor threshold	No information available		
Property	Values	Remarks • Method	
Hq	no data available	None known	
Melting point / freezing point	-15 °C / 5 °F	None known	
Boiling point / boiling range	96 - 98 °C / 204.8 - 208.4 °F	None known	
Flash point	50 - 60 °C / 122 - 140 °F	None known	
Evaporation rate	no data available	None known	
Flammability (solid, gas)	no data available	None known	
Flammability Limit in Air		None known	
Upper flammability or explosive	No data available		
limits			
Lower flammability or explosive	No data available		
limits			
Vapor pressure	2.2 - 2.4	None known	
Vapor density	1.03 - 1.04	None known	
Relative density	1.06 - 1.09	None known	
Water solubility	Soluble in water	None known	
Solubility(ies)	Soluble in hot alcohol	None known	
	Soluble in Benzene		
	Soluble in Acetone		
	Soluble in Ether		
Partition coefficient	No data available	None known	
Autoignition temperature	424 - 430 °C / 795.2 - 806 °F		
Decomposition temperature		None known	
Kinematic viscosity	no data available	None known	
Dynamic viscosity	No data available	None known	
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Other information			
Explosive properties	No information available		
Oxidizing properties	No information available		
Softening point	No information available		
Molecular weight	30.03		
VOC Content (%)	No information available		
Liquid Density	No information available		
Bulk density	No information available		
······			
40 Stability and reactivity			

# 10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Acids. Bases. Oxidizing agent.
Hazardous decomposition products None known based on information supplied	

Hazardous decomposition products None known based on information supplied.

# 11. Toxicological information

### Information on likely routes of exposure

### **Product Information**

Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Toxic by inhalation.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Toxic in contact with skin.
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.
Symptoms related to the physical	chemical and toxicological characteristics

# Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes.
	Hives. Difficulty in breathing.

### Acute toxicity

Numerical measures of toxicity

### The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-gas)	1,505.40 ppm
ATEmix (inhalation-vapor)	6.45 mg/l

### Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	90 mL/kg (Rat)	-	-
Formaldehyde 50-00-0	500 mg/kg (Rat)	-	0.578 mg/L (Rat)4 h
Methyl Alcohol 67-56-1	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	83.2 mg/L (Rat)4 h

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

Skin corrosion/irritation Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes burns. Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
Respiratory or skin sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.
Carcinogenicity	Contains a known or suspected carcinogen. Classification based on data available for
	ingredients. May cause cancer.
The table below indicates whether ea	ach agency has listed any ingredient as a carcinogen.

 Chemical name
 ACGIH
 IARC
 NTP
 OSHA

 Formaldehyde
 Group 1 -Carcinogenic to

50-00-0		humans - Monograph 100F [2012] Monograph 88 [2006] Monograph 62 [1005]		
		Monograph 62 [1995] Supplement 7 [1987]		
Methyl Alcohol 67-56-1	GROUP 5	-	HDFHF	JGJG
Legend				
Reproductive toxicity		nown or suspected reproduts. Suspected of damaging		
STOT - single exposure	country or re determined to Causes dam	Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin. Causes damage to organs if inhaled.		
STOT - repeated exposur Target organ effects	e Causes dam	Causes damage to organs through prolonged or repeated exposure. respiratory system, Eyes, Skin, central nervous system, Gastrointestinal tract (GI).		
Aspiration hazard	No information	No information available.		
Other adverse effects	No information	on available.		
Interactive effects	No information	on available.		

## 12. Ecological information

Toxic to aquatic life. Toxic to aquatic life with long lasting effects. Ecotoxicity Algae/aquatic plants Fish Toxicity to Crustacea Chemical name microorganisms Formaldehyde LC50: 0.032 - 0.226mL/L EC50: 11.3 - 18mg/L 50-00-0 (96h, Oncorhynchus (48h, Daphnia magna) mykiss) LC50: 100 -LC50: =2mg/L (48h, 136mg/L (96h, Daphnia magna) Oncorhynchus mykiss) LC50: 22.6 - 25.7mg/L (96h, Pimephales promelas) LC50: 23.2 -29.7mg/L (96h, Pimephales promelas) LC50: =1510µg/L (96h, Lepomis macrochirus) LC50: =41mg/L (96h, Brachydanio rerio) Methyl Alcohol LC50: 13500 ----67-56-1 17600mg/L (96h, Lepomis macrochirus) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 19500 -20700mg/L (96h, Oncorhynchus mykiss) LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas)

Persistence and degradability Bioaccumulation

No information available. Inherently biodegradable.

**Component Information** 

Chemical name	Partition coefficient
Formaldehyde	0.35

50-00-0	
Methyl Alcohol	-0.77
67-56-1	

Other adverse effects

No information available.

# 13. Disposal considerations Waste treatment methods Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

# 14. Transport information

DOT UN/ID no Proper Shipping Name: Hazard class Subsidiary Class Packing group: Special Provisions Marine Pollutant Description: Emergency Response Guide Number	UN1198 Formaldehyde solutions, flammable 3 8 III 176, B1, IB3, T4, TP1 Severe Marine Pollutant UN1198, Formaldehyde solutions, flammable, 3 (8), III 132
TDG UN-No: Proper Shipping Name: Hazard class Subsidiary Class Packing Group: Description:	UN1198 Formaldehyde solution, flammable 3 8 III UN1198, Formaldehyde solution, flammable, 3 (8), III
MEX UN-No Proper Shipping Name Hazard class Subsidiary Class Packing Group Description	UN1198 Formaldehyde solution, flammable 3 8 III UN1198, Formaldehyde solution, flammable, 3 (8), III
ICAO (air) UN-No: Proper Shipping Name: Hazard class Subsidiary hazard class Packing Group: Special Provisions Description:	UN1198 Formaldehyde solution, flammable 3 8 III A180 UN1198, Formaldehyde solution, flammable, 3 (8), III
IATA UN number Proper Shipping Name: Transport hazard class(es) Subsidiary hazard class Packing group	UN1198 Formaldehyde solution, flammable 3 8 III

Description:	UN1198, Formaldehyde solution, flammable, 3 (8), III
IMDG UN number Proper shipping name Transport hazard class(es) Subsidiary hazard class Packing group EmS-No Marine pollutant Description	UN1198 Formaldehyde solution, flammable 3 8 III F-E, S-C NP1 UN1198, Formaldehyde solution, flammable, 3 (8), III, (50°C c.c.)
RID UN number Proper Shipping Name: Transport hazard class(es) Packing group Classification code Description: Labels	UN1198 Formaldehyde solution, flammable 3 III FC UN1198, Formaldehyde solution, flammable, 3 (8), III 3 + 8
ADR UN number Proper Shipping Name: Transport hazard class(es) Subsidiary hazard class Packing group Classification code Tunnel restriction code Description: Labels	1198 Formaldehyde solution, flammable 3 8 III FC (D/E) 1198, Formaldehyde solution, flammable, 3 (8), III, (D/E) 3 + 8
ADN UN/ID No Proper shipping name Transport hazard class(es) Packing Group Classification code Description Hazard label(s) Limited quantity (LQ) ventilation Equipment Requirements	UN1198 Formaldehyde solution, flammable 3 III FC UN1198, Formaldehyde solution, flammable, 3 (+ 8), III 3 + 8 5 L VE01 PP, EP, EX, A

# 15. Regulatory information

### International Inventories

TSCA

Complies

DSL/NDSL EINECS/ELINCS	Complies Complies
ENCS	This product complies with ENCS:
IECSC	This product complies with China:
KECL	Complies
PICCS	Complies
AICS	All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

 TSCA
 - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL
 - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS
 - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

- **IECSC** China Inventory of Existing Chemical Substances
- KECL Korean Existing and Evaluated Chemical Substances
- **PICCS** Philippines Inventory of Chemicals and Chemical Substances

### US 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	SARA 313 - Threshold Values %	
Formaldehyde - 50-00-0	0.1	
Methyl Alcohol - 67-56-1	1.0	

### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

### **CWA (Clean Water Act)**

This product contains the following substances which are regulated 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 50-00-0	-	-	-	Present

### 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).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Formaldehyde	100 lb final RQ	-
50-00-0	45.4 kg final RQ	
Methyl Alcohol	5000 lb final RQ	-
67-56-1	2270 kg final RQ	

### US State Regulations

### **California Proposition 65**

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65	
Formaldehyde - 50-00-0	carcinogen	
Methyl Alcohol - 67-56-1	developmental toxicity	

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Formaldehyde	0946	Present	Environmental hazard
50-00-0			Special hazardous substance
Methyl Alcohol	1222	Present	Environmental hazard
67-56-1			

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

### 16. Other information

NFPA Health hazards 3 Flammability 2 Instability 0 Physical and chemical properties -HMIS Health hazards 3\* Flammability 2 Physical hazards 0 Personal protection X Chronic Hazard Star Legend \* = Chronic Health Hazard Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit) Ceiling Maximum limit value Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization Revision date 29-April-2022

Revision date29-April-2022Revision NoteNo 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 Safety Data Sheet