# SAFETY DATA SHEET SPECTRUM®



Revision date 01-August-2022

**Revision Number** 1

## 1. Identification

**Product identifier** 

Product Name FORMALDEHYDE, 4 PERCENT (V/V) SOLUTION

Other means of identification

Product Code(s) F-260

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

Supplier Address

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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
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

## Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

Danger

#### Hazard statements

Causes skin irritation
Causes serious eye irritation

May cause an allergic skin reaction

May cause cancer

Suspected of damaging fertility or the unborn child

Causes damage to organs

Causes damage to organs through prolonged or repeated exposure



Appearance Clear Physical state Liquid Odor No information available

## **Precautionary Statements - Prevention**

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

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing must not be allowed out of the workplace

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

Do not eat, drink or smoke when using this product

## **Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF exposed: Call a POISON CENTER or doctor

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 IF ON SKIN: Wash with plenty of water and soap

Take off contaminated clothing and wash it before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor if you feel unwell

# **Precautionary Statements - Storage**

Store locked up.

# **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Unknown acute toxicity

### Other information

May be harmful if swallowed.

# 3. Composition/information on ingredients

#### Substance

Not applicable.

## <u>Mixture</u>

-	Chemical name	CAS No	Weight-%	Trade secret
	Water	7732-18-5	80 - 100	*
	Formaldehyde, 37% Solution	50-00-0	3 - <5	*

Methyl Alcohol	67-56-1	0.1 - 1	*

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

## 4. First-aid measures

## **Description of first aid measures**

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get

medical advice/attention.

**Inhalation** Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical

attention immediately if symptoms occur. If symptoms persist, call a physician. If breathing

has stopped, give artificial respiration. Get medical attention immediately.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation

develops and persists. Do not rub affected area.

**Skin contact** May cause an allergic skin reaction. If symptoms persist, call a physician. Wash off

immediately with soap and plenty of water for at least 15 minutes.

**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 medical attention.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the

material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as

required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.

Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

# 5. Fire-fighting measures

surrounding environment.

Large Fire 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** Product is or contains a sensitizer. May cause sensitization by skin contact.

chemical

**Explosion data** 

Sensitivity to mechanical impact none.

Sensitivity to static discharge none.

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** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak. Avoid breathing vapors or mists.

**Other information** Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

# 7. Handling and storage

## Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and

shoes. Avoid breathing vapors or mists.

## Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

# 8. Exposure controls/personal protection

#### Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Formaldehyde, 37% Solution	No data available	0.75 ppm TWA	-
50-00-0		2 ppm STEL	
Methyl Alcohol	No data available	200 ppm TWA	-
67-56-1		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

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

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. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical stateLiquidAppearanceClearColorColorless

Odor No information available
Odor threshold No information available

Property Values Remarks • Method

pН no data available None known no data available Melting point / freezing point None known None known Boiling point / boiling range no data available no data available None known Flash point None known no data available **Evaporation rate** 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

No data available Vapor pressure None known Vapor density no data available None known Relative density no data available None known Water solubility Miscible in water None known Solubility(ies) Miscible with alcohol None known **Partition coefficient** No data available None known **Autoignition temperature** no data available None known **Decomposition temperature** None known Kinematic viscosity no data available None known **Dynamic viscosity** No data available None known

Other information

Explosive properties

Oxidizing properties

No information available

## 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 Excessive heat.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

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. May cause irritation of

respiratory tract. Harmful by inhalation. (based on components).

**Eye contact** Specific test data for the substance or mixture is not available. Irritating to eyes. (based on

components). Causes serious eye irritation.

**Skin contact** May cause sensitization by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons. (based on components). Causes skin irritation.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

## Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Coughing

and/ or wheezing.

**Acute toxicity** 

Numerical measures of toxicity

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

## Unknown acute toxicity

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	90 mL/kg (Rat)	-	-
7732-18-5			
Formaldehyde, 37% Solution	500 mg/kg (Rat)	-	0.578 mg/L (Rat) 4 h
50-00-0			-
Methyl Alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	83.2 mg/L (Rat) 4 h
67-56-1			

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

**Skin corrosion/irritation**Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Respiratory or skin sensitization Germ cell mutagenicity Classification based on data available for ingredients. Causes serious eye irritation.

May cause sensitization by skin contact.

Contains a known or suspected mutagen. Classification based on data available for

ingredients. Suspected of causing genetic defects.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Formaldehyde, 37%	-	Monograph 100F [2012]	-	-
Solution		Monograph 88 [2006]		
50-00-0		Monograph 62 [1995]		
		Supplement 7 [1987]		
Methyl Alcohol	GROUP 5	-	HDFHF	JGJG
67-56-1				

#### Legend

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available

for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure 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 inhaled.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure.

Target organ effects respiratory system, Eyes, Skin.

**Aspiration hazard** No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

**Ecotoxicity** 

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Formaldehyde, 37%	-	LC50: 0.032 - 0.226mL/L	-	EC50: 11.3 - 18mg/L
Solution		(96h, Oncorhynchus		(48h, Daphnia magna)
50-00-0		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** 

Partition coefficient	
0.35	
-0.77	

Other adverse effects No information available.

# 13. Disposal considerations

## Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# 14. Transport information

DOT not regulated TDG not regulated not regulated MEX ICAO (air) not regulated IATA not regulated IMDG not regulated not regulated RID ADR not regulated

# 15. Regulatory information

#### **International Inventories**

TSCA Complies

DSL/NDSL Complies EINECS/ELINCS Complies

**ENCS IECSC**This product complies with ENCS:
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).

not regulated

#### Legend:

ADN

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, 37% Solution - 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 does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## **CERCLA**

This material, as supplied, 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, 37% Solution	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, 37% Solution - 50-00-0	carcinogen	
Methyl Alcohol - 67-56-1	developmental toxicity	

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

	Chemical name	New Jersey	Massachusetts	Pennsylvania
Ī	Formaldehyde, 37% Solution	0946	Present	Environmental hazard
-	50-00-0			Special hazardous substance
Ī	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 0 Instability 0

Physical and chemical properties -

HMIS

Health hazards \* 3 Flammability 0 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

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Revision Note 01-August-2022
No information available.

**Disclaimer** 

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**End of Safety Data Sheet**