ESSENTIAL CHEMISTRY. INNOVATIVE SOLUTIONS.

SAFETY DATA SHEET

Print Date: March 9, 2017

Section 1: Product & Company Information

Product Identifier: **Formaldehyde Solution 37% (7% Methanol)**

Other Means of Identification
Product Number: No data available.

Recommended Use and Restrictions on Use
Recommended Use: No data available.
Restrictions on Use : No data available.

Manufacturer / Importer / Supplier / Distributor Information
Company Name: CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918
USA

Information Telephone Number: 1-865-524-4239
Fax Number: 1-865-524-3375
Website: www.corecheminc.com
Contact Person: Regulatory Manager
E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 *(monitored 24 hours/day)*

Section 2: Hazards Identification

GHS Hazard Classification(s)
In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s)
Flammable, Liquids - 3

Health Hazard(s)
Acute Toxicity, Oral - 3
Corrosion/Irritation, Skin - 2
Carcinogenicity - 1

Environmental Hazard(s)
Aquatic, Acute - 3

Label Elements
Signal Word
DANGER

Hazard Symbol(s)

Hazard Statement(s)
H226: Flammable liquid and vapor.
H301: Toxic if swallowed.
H315: Causes skin Irritation.
H350: May cause cancer.
H402: Harmful to aquatic life.

Precautionary Statements
General
Not applicable.

Prevention
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

Response

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308 + P313: IF exposed or concerned: Get medical advice/attention.
P321: Specific treatment (see supplemental first aid instructions on this label).
P330: Rinse mouth.
P332 + P313: If skin irritation occurs: Get medical advice/attention.
P362: Take off contaminated clothing and wash before reuse.
P370 + P378: In case of fire: Use suitable extinguishing media for extinction.

Storage

P403 + P235: Store in a well-ventilated place. Keep cool.
P405: Store locked up.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Mixture

Chemical Identity [2]	Common Name/Synonym(s)	CAS # [3]	Weight %	Impurity or Stabilizing Additive
Formaldehyde	-	50-00-0	37%	No
Methyl Alcohol	Methanol	67-56-1	10 - 15%	No

1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
3. "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact

Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Symptoms

Causes severe skin and eye burns. Toxic if swallowed. May cause allergic skin reaction. Toxic in contact with skin. Toxic if inhaled.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

Treat symptomatically.

Section 5: Fire-Fighting Measures

General Fire Hazards

Flammable liquid and vapor.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

Extinguishing powder, alcohol resistant foam, carbon dioxide, water fog

Unsuitable Extinguishing Media

Avoid water in straight hose stream; will scatter and spread fire.

Specific Hazards Arising from the Chemical

Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Heat may cause the containers to explode.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Special Protective Equipment for Fire-Fighters

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

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate area.

Methods and Materials for Containment and Clean-Up

Eliminate all ignition sources if safe to do so. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Precautions for Safe Handling

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Ground/bond container and receiving equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using the product. Use caution when adding this material to water. See Section 8 of the SDS for Personal Protective Equipment. Avoid contact with eyes. Avoid contact with skin.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Value	Source
Formaldehyde	Ceiling	0.3 ppm	US. ACGIH Threshold Limit Values
	TWA	0.75 ppm	US OSHA Table Z-1
	STEL	2 ppm	US OSHA Table Z-1
	OSHA_ACT	0.5 ppm	US OSHA Table Z-1
Methyl Alcohol	TWA	200 ppm	US. ACGIH Threshold Limit Values
	STEL	250 ppm	US. ACGIH Threshold Limit Values
	PEL	200 ppm 260 mg/m3	US OSHA Table Z-1

Biological Limit Values

Chemical Identity	CAS #	Parameter	Value	Biological Specimen	Source
Methyl Alcohol	67-56-1	Methanol	15 mg/l	Urine	ACGIH – Biological Exposure Indices (BEI)
	Remarks: Sampling Time: End of Shift				

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

Eye/Face Protection
Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin Protection
Hand Protection
Wear appropriate chemical resistant gloves.
Other
Wear appropriate chemical resistant clothing.

Respiratory Protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

Hygiene Measures
When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:	
Physical State:	Liquid
Color:	Colorless
Odor:	Pungent
Odor Threshold:	No data available.
pH:	3.0
Melting Point/Freezing Point:	-15 °C
Initial Boiling Point and Boiling Range:	96 °C
Flash Point:	60 °C
Evaporation Rate (butyl acetate=1)**:**	No data available.
Flammability (solid, gas):	No data available.
Upper/Lower Limit on Flammability or Explosive Limits	
Flammability Limit – Upper:	73 %(V)
Flammability Limit – Lower:	7.0 %(V)
Explosive Limit – Upper:	No data available.
Explosive Limit – Lower:	No data available.
Vapor Pressure:	0.17 kPa
Vapor Density (air =1)**:**	No data available.
Relative Density (water=1)**:**	1.08 (20 °C)
Solubility(ies):	
Solubility in water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-Ignition Temperature:	300 °C
Decomposition Temperature:	No data available.
Viscosity:	No data available.

Other Information:

Molecular Weight:	No data available.
Formula:	No data available.

Section 10: Stability and Reactivity

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical Stability
Material is stable under normal conditions.

Possibility of Hazardous Reactions
Hazardous polymerization does not occur.

Conditions to Avoid
Heat, sparks, flames. Moisture. Contact with incompatible materials.

Incompatible Materials
Strong oxidizing agents. Alkalies. Acids.

Hazardous Decomposition Products
Oxides of Carbon. Formaldehyde.

Section 11: Toxicological Information

Information on routes of exposure
Ingestion: Toxic if swallowed.

Inhalation: Toxic if inhaled. Irritating to respiratory tract.
Skin Contact: Toxic in contact with skin. Causes skin burns. May cause an allergic skin reaction.
Eye Contact: Causes serious eye damage.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Formaldehyde Solution: ATEmix: 270.27 mg/kg

Dermal

Methyl Alcohol: LD 50 (Rabbit): 15,800 mg/kg

Inhalation

Formaldehyde: LC 50 (Rat, 4 h): 0.48 mg/l
Methyl Alcohol: LC 50 (Rat, 6 h): 87.5 mg/l

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

Causes severe skin burns and eye damage.

Serious Eye Damage/Eye Irritation

Causes serious eye damage.

Respiratory/Skin Sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Group 1, Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Known to be human carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No data available.

Germ Cell Mutagenicity

In Vitro

No mutagenic components identified.

In Vivo

No mutagenic components identified.

Reproductive Toxicity

No components toxic to reproduction

Specific Target Organ Toxicity – Single Exposure

Respiratory System, Central nervous system. - Causes damage to organs.

Specific Target Organ Toxicity – Repeated Exposure

Eyes., Central nervous system. - Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard

Not classified.

Other Effects

Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

Formaldehyde: LC 50 (Fathead minnow (Pimephales promelas), 96 h): 22.61 - 25.71 mg/l Mortality
Formaldehyde: LC 50 (Bluegill (Lepomis macrochirus), 96 h): 25.4 - 34 mg/l Mortality
Methyl Alcohol: LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 18,000 - 20,000 mg/l Mortality
Methyl Alcohol: LC 50 (Fathead minnow (Pimephales promelas), 96 h): 28,200 mg/l Mortality

Aquatic Invertebrates

Formaldehyde: EC 50 (Water flea (Daphnia magna), 48 h): 29 mg/l Intoxication
Methyl Alcohol: EC 50 (Water flea (Daphnia magna), 48 h): 20,450 - 29,350 mg/l Intoxication
Methyl Alcohol: LC 50 (Water flea (Daphnia magna), 48 h): 2,461 - 4,395 mg/l Mortality

Toxicity to Aquatic Plants

No data available.

Chronic Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates
No data available.

Toxicity to Aquatic Plants
No data available.

Persistence and Degradability

Biodegradation
There are no data on the degradability of this product.

BOD/COD Ratio
No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)
No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

Formaldehyde	Log Kow: 0.35
Methyl Alcohol	Log Kow: -0.77

Mobility in Soil
The product is water soluble and may spread in water systems.

Other Adverse Effects
Harmful to aquatic organisms.

Section 13: Disposal Considerations

Disposal Instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated Packaging
Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

Section 14: Transportation Information

US Department of Transportation (DOT)

UN Number:	UN1198
UN Proper Shipping Name:	Formaldehyde solutions, flammable
Technical Name:	
Hazard Class :	3
Subsidiary Hazard Risk:	8
Packing Group:	III
DOT Label/Placard Exemptions:	Not determined
Special Provisions:	176, B1, IB3, T4, TP1
Packaging Exceptions:	49CFR 173.150
Packaging Non-Bulk:	49CFR 173.203
Packaging Bulk:	49CFR 173.242
Reportable Quantity (RQ):	100lb (45.4kg)
Marine Pollutant:	No
Poison Inhalation Hazard:	No
Special precautions for user:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Emergency Response Guidebook (ERG) #:	132

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)
This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)
The following chemical(s) in this material are subject to reporting levels established by CERCLA:
Formaldehyde (CAS # 50-00-0)
Methyl Alcohol (CAS # 67-56-1)

Clean Air Act (CAA), Section 112(r)
The following chemical(s) in this material are subject to reporting levels established by CAA:
Formaldehyde (CAS # 50-00-0)

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance
The following chemicals(s) in this material are subject to reporting levels established by SARA Title III, Section 302:
Formaldehyde (CAS # 50-00-0)

EPCRA 304 Emergency Response Notification
The following chemicals(s) in this material are subject to reporting levels established by SARA Title III, Section 304:
Formaldehyde (CAS # 50-00-0)

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard:	Yes
Sudden Release of Pressure:	No
Reactive:	No
Acute (Immediate) Health Hazard:	Yes
Chronic (Delayed) Health Hazard:	Yes

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting
The following chemical(s) in this material are subject to reporting levels established by SARA Title III, Section 313:
Formaldehyde (CAS # 50-00-0)
Methyl Alcohol (CAS # 67-56-1)

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)
This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard:	**3**
Chronic Health Hazard:	*****
Flammability:	**2**
Physical Hazard:	**0**

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard:	**3**
Fire Hazard:	**2**
Reactivity Hazard:	**0**
Special:	**N/A**

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By:	Regulatory Manager
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Revisions:	-

Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
EC50 - Effective concentration, 50%
IDHL – Immediately Dangerous to Life and Health
Kg – Kilogram
l – Liter
lb – Pound
LC50 - Lethal Concentration, 50%
LD50 - Lethal Dose, 50%
mg - milligram
ml – milliliter
N/A – Not Applicable
N/D – Not Determined
PEL – Permissible Exposure Limit
REL – Recommended Exposure Limit
STEL – Short-term Exposure Limit
TWA - Time weighted average
ACGIH - American Conference of Industrial Hygienists
AIHA – American Industrial Hygiene Association
BEI - Biological Exposure Indices
CAS – Chemical Abstracts Service
DOT – US Department of Transportation
EPA – US Environmental Protection Agency
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC - Intermediate Bulk Container
IMDG - International Maritime Dangerous Goods
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OSHA – US Occupational Health and Safety Administration
SARA – US EPA Superfund Amendments and Reauthorization Act
TSCA – US EPA Toxic Substances Control Act
UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

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