

MATERIAL SAFETY DATA SHEET

Product Name: SPX Methanol

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Issue Date: 09/06/01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: SPX Methanol
Chemical Family: hydroxyls, aliphatic
Symbol: CH₄O

Responsible Party:
SIMONS PETROLEUM, INC.

EMERGENCYOVERVIEW 24 Hour Emergency Telephone Numbers:

Spill, Leak, Fire or Accident
Call CHEMTREC
North America: (800)424-9300
Others: (703)527-3887 (collect)

TRADE NAMES/SYNONYMS:

METHANOL; WOOD ALCOHOL; METHYL HYDROXIDE; CARBINOL; MONOHYDROXYMETHANE; WOOD SPIRIT;
WOOD NAPHTHA; METHYLOL; COLONIAL SPIRIT; COLUMBIAN SPIRIT; PYROXYLIC SPIRIT; STCC 4909230; UN
1230; RCRA U154; CH₄O; MAT14280; RTECS PC1400000

2. COMPOSITION, INFORMATION ON INGREDIENTS-----

COMPONENT: METHANOL

CAS NUMBER: 67-56-1

EC NUMBER (EINECS): 200-659-6

EC INDEX NUMBER: 603-001-00-X

PERCENTAGE: 100.0

3. HAZARDS IDENTIFICATION-----

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=3 REACTIVITY=0

WHMIS CLASSIFICATION: BD2

EC CLASSIFICATION (ASSIGNED):

F Highly Flammable
T Toxic

R 11-23/25



EC Classification may be inconsistent with independently-researched data.

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EMERGENCY OVERVIEW:

Color: colorless

Physical Form: liquid

Odor: sweet odor

Major Health Hazards: skin irritation, eye irritation, central nervous system depression

Physical Hazards: Flammable liquid and vapor. Vapor may cause flash fire.

POTENTIAL HEALTH EFFECTS:

INHALATION:

Short Term Exposure: same as effects reported in short term ingestion, irritation, ringing in the ears, digestive disorders, symptoms of drunkenness, visual disturbances, nerve damage

Long Term Exposure: same as effects reported in short term ingestion, headache

SKIN CONTACT:

Short Term Exposure: same as effects reported in short term ingestion, irritation, symptoms of drunkenness, nerve damage

Long Term Exposure: same as effects reported in short term exposure

EYE CONTACT:

Short Term Exposure: irritation, eye damage

Long Term Exposure: same as effects reported in short term exposure

INGESTION:

Short Term Exposure: nausea, vomiting, diarrhea, difficulty breathing, irregular heartbeat, headache, drowsiness, symptoms of drunkenness, disorientation, hearing loss, blindness, bluish skin color, lung congestion, nerve damage, convulsions, coma

Long Term Exposure: same as effects reported in short term exposure

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

4. FIRST AID MEASURES-----

INHALATION:

Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT:

Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT:

Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION:

If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

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ANTIDOTE:

ethanol, oral; calcium gluconate/glucose, intravenous. 4-methylpyrazole, oral, intravenous.

5. FIRE FIGHTING MEASURES-----

FIRE AND EXPLOSION HAZARDS:

Severe fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive.

EXTINGUISHING MEDIA:

alcohol resistant foam, carbon dioxide, regular dry chemical, water

Large fires: Use alcohol-resistant foam or flood with fine water spray.

FIRE FIGHTING:

Move container from fire area if it can be done without risk. Dike for later disposal. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile).

FLASH POINT: 52 F (11 C) (CC)

LOWER FLAMMABLE LIMIT: 6.0%

UPPER FLAMMABLE LIMIT: 36.0%

AUTOIGNITION: 725 F (385 C)

FLAMMABILITY CLASS (OSHA): IB

6. ACCIDENTAL RELEASE MEASURES-----

AIR RELEASE:

Reduce vapors with water spray.

SOIL RELEASE:

Dig holding area such as lagoon, pond or pit for containment. Dike for later disposal.

WATER RELEASE:

Cover with absorbent sheets, spill-control pads or pillows. Remove trapped material with suction hoses.

OCCUPATIONAL RELEASE:

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry. Reportable Quantity (RQ): Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

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7. HANDLING AND STORAGE-----

Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.106. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION-----

EXPOSURE LIMITS:

METHANOL:

METHYL ALCOHOL (METHANOL):

200 ppm (262 mg/m³) OSHA TWA (skin)

250 ppm (328 mg/m³) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)

200 ppm (262 mg/m³) ACGIH TWA (skin)

250 ppm (328 mg/m³) ACGIH STEL

200 ppm (262 mg/m³) NIOSH recommended TWA (skin)

250 ppm (328 mg/m³) NIOSH recommended STEL

VENTILATION: Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.

2000 ppm

Any supplied-air respirator.

5000 ppm

Any supplied-air respirator.

6000 ppm

Any supplied-air respirator with a full facepiece.

Any self-contained breathing apparatus with a full facepiece.

Any supplied-air respirator with a full facepiece.

Escape -

Any appropriate escape-type, self-contained breathing apparatus.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

9. PHYSICAL AND CHEMICAL PROPERTIES-----

PHYSICAL STATE: liquid

APPEARANCE: clear

COLOR: colorless

ODOR: sweet odor

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MOLECULAR WEIGHT: 32.04

MOLECULAR FORMULA: C-H3-O-H

BOILING POINT: 149 F (65 C)

FREEZING POINT: -137 F (-94 C)

VAPOR PRESSURE: 97.25 mmHg @ 20 C

VAPOR DENSITY (air=1): 1.11

SPECIFIC GRAVITY (water=1): 0.7914

WATER SOLUBILITY: soluble

PH: Not available

VOLATILITY: Not available

ODOR THRESHOLD: 100 ppm

EVAPORATION RATE: 4.6 (butyl acetate=1)

VISCOSITY: 0.59 cP @ 20 C

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SOLVENT SOLUBILITY:

Soluble: ether, benzene, alcohol, acetone, chloroform, ethanol

10. STABILITY AND REACTIVITY-----

REACTIVITY:

Stable at normal temperatures and pressure.

CONDITIONS TO AVOID:

Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Avoid inhalation of material or combustion by-products. Keep out of water supplies and sewers.

INCOMPATIBILITIES:

halo carbons, combustible materials, metals, oxidizing materials, halogens, metal carbide, bases, acids

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: oxides of carbon

POLYMERIZATION:

Will not polymerize.

11. TOXICOLOGICAL INFORMATION-----

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METHANOL:

IRRITATION DATA:

20 mg/24 hour(s) skin-rabbit moderate; 40 mg eyes-rabbit moderate; 100 mg/24 hour(s) eyes-rabbit moderate

TOXICITY DATA:

64000 ppm/4 hour(s) inhalation-rat LC50; 15800 mg/kg skin-rabbit LD50; 5628 mg/kg oral-rat LD50

LOCAL EFFECTS:

Irritant: skin, eye

ACUTE TOXICITY LEVEL:

Slightly Toxic: dermal absorption, ingestion
Relatively Non-toxic: inhalation

TARGET ORGANS:

nervous system

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

eye disorders, kidney disorders, skin disorders and allergies

MUTAGENIC DATA:

Available.

REPRODUCTIVE EFFECTS DATA:

Available.

12. ECOLOGICAL INFORMATION-----

ECOTOXICITY DATA:

FISH TOXICITY:

74.3 ug/L 96 hour(s) LC50 (Mortality) Gudgeon (*Gobio gobio*)

INVERTEBRATE TOXICITY:

383 ug/L 48 hour(s) EC50 (Immobilization) Water flea (*Daphnia magna*)

ALGAL TOXICITY:

200-480 ug/L 8 hour(s) (Population) Algae, phytoplankton, algal mat (Algae)

PHYTOTOXICITY:

0.1 ug/L 21 week(s) (Biochemical) Eelgrass (*Zostera marina*)

OTHER TOXICITY:

3.2 ug/L 3-21 day(s) (Chlorophyll) Aquatic community (Aquatic community)

FATE AND TRANSPORT:

BIOCONCENTRATION:

1200 ug/L 48 hour(s) BCF (Residue) Bluegill (*Lepomis macrochirus*) 2.7 ug/L

ENVIRONMENTAL SUMMARY:

Highly toxic to aquatic life.

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13. DISPOSAL CONSIDERATIONS-----

Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U154. Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION-----

U.S. DOT 49 CFR 172.101. SHIPPING NAME-UN NUMBER; HAZARD CLASS; PACKING GROUP; LABEL:

Methanol-UN1230; 3; II; Flammable liquid; Poison



15. REGULATORY INFORMATION-----

U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed

CERCLA SECTION 103 (40CFR302.4): Y

Methanol: 5000 LBS RQ

SARA SECTION 302 (40CFR355.30): N

SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): Y

Methanol

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: Y

CHRONIC: N

FIRE: Y

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: N

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 200-659-6

EC RISK AND SAFETY PHRASES:

R 11	Highly flammable.
R 23/25	Toxic by inhalation and if swallowed.
S 1/2	Keep locked-up and out of reach of children.
S 7	Keep container tightly closed.
S 16	Keep away from sources of ignition - No smoking.
S 24	Avoid contact with skin.
S 45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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CONCENTRATION LIMITS:

C_{>=20%} T R 23/25

3%_{<=C<20%} Xn R 20/22

16. OTHER INFORMATION-----

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