



Post Apple Scientific, inc
8893 Gulf Rd
North East, PA 16428

SAFETY DATA SHEET

Creation Date 05-May-2014

Revision Date 23-Oct-2014

Revision Number 1

1. Identification

Product Name Methanol
Cat No. : C5340, C5350
Synonyms Methyl alcohol
Recommended Use Laboratory chemicals.
Uses advised against No Information available
Details of the supplier of the safety data sheet

Company

Post Apple Scientific, inc.
8893 Gulf Rd
North East, PA 16428
Tel: 814-725-3330

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 - Dusts and Mists | Category 3 |
| Specific target organ toxicity (single exposure) | Category 1 |
| Target Organs - Respiratory system, Central nervous system (CNS), Optic nerve. | |
| Specific target organ toxicity - (repeated exposure) | Category 1 |
| Target Organs - Kidney, Liver, spleen, Blood, Respiratory system. | |

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor

Toxic if swallowed
 Toxic in contact with skin
 Toxic if inhaled
 May cause respiratory irritation
 May cause drowsiness or dizziness
 Causes damage to organs
 Causes damage to organs through prolonged or repeated exposure



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 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

IF exposed: 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
 Call a POISON CENTER or doctor/physician

Skin

Call a POISON CENTER or doctor/physician if you feel unwell
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth

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)

None identified

Other hazards

Poison, may be fatal or cause blindness if swallowed. Vapor harmful. Cannot be made non-poisonous. WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|----------------|---------|----------|
| Methyl alcohol | 67-56-1 | 100 |

4. First-aid measures

| | |
|--|---|
| General Advice | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. |
| 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 | Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required. |
| Ingestion | Do not induce vomiting. Call a physician or Poison Control Center immediately. |
| Most important symptoms/effects | Breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause blindness: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | CO ₂ , dry chemical, dry sand, alcohol-resistant foam. Use water spray to cool unopened containers. Cool closed containers exposed to fire with water spray. |
| Unsuitable Extinguishing Media | Water may be ineffective |
| Flash Point | 12 °C / 53.6 °F |
| Method - | No information available |
| Autoignition Temperature | 455 °C / 851 °F |
| Explosion Limits | |
| Upper | 31.00 vol % |
| Lower | 6.0 vol % |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

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

Hazardous Combustion Products

Carbon monoxide (CO) 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
1

Flammability
3

Instability
0

Physical hazards
N/A

6. Accidental release measures

| | |
|-----------------------------|--|
| Personal Precautions | Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Ensure adequate ventilation. Take precautionary measures against static discharges. |
|-----------------------------|--|

Environmental Precautions Should not be released into the environment.

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

7. Handling and storage

Handling Wear personal protective equipment. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only non-sparking tools. Use explosion-proof equipment.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammables area.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------|---------------------------------------|--|--|
| Methyl alcohol | TWA: 200 ppm STEL: 250 ppm Skin | (Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m ³ (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m ³ Skin TWA: 200 ppm TWA: 260 mg/m ³ | IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|----------------|--|--|---------------------------------------|
| Methyl alcohol | TWA: 200 ppm TWA: 262 mg/m ³ STEL: 250 ppm STEL: 328 mg/m ³ Skin | TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 310 mg/m ³ | TWA: 200 ppm STEL: 250 ppm Skin |

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

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

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. Physical and chemical properties

| | |
|----------------------------|--------------------------|
| Physical State | Liquid |
| Appearance | Colorless |
| Odor | Alcohol-like |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | -98 °C / -144.4 °F |

| | |
|---|-------------------------------|
| Boiling Point/Range | 64.7 °C / 148.5 °F @ 760 mmHg |
| Flash Point | 12 °C / 53.6 °F |
| Evaporation Rate | 5.2 (ether = 1) |
| Flammability (solid,gas) | Not applicable |
| Flammability or explosive limits | |
| Upper | 31.00 vol % |
| Lower | 6.0 vol % |
| Vapor Pressure | 128 hPa @ 20 °C |
| Vapor Density | 1.11 |
| Relative Density | 0.791 |
| Solubility | Miscible with water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 455 °C / 851 °F |
| Decomposition Temperature | No information available |
| Viscosity | 0.55 cP at 20 °C |
| Molecular Formula | C H4 O |
| Molecular Weight | 32.04 |
| Surface tension | 0.02255 N/m @ 20°C |

10. Stability and reactivity

| | |
|---|---|
| Reactive Hazard | None known, based on information available |
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Incompatible products. Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of ignition. |
| Incompatible Materials | Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides, Strong bases, Metals, Peroxides |
| Hazardous Decomposition Products | Carbon monoxide (CO), Formaldehyde |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|----------------|--------------------|-------------|-----------------------|
| Methyl alcohol | 6200 mg/kg (Rat) | Not listed | 22500 ppm (Rat) 8 h |

Toxicologically Synergistic Products Carbon tetrachloride

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

| | |
|------------------------|--|
| Irritation | Irritating to eyes and skin |
| 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 |

Mutagenic Effects Mutagenic effects have occurred in experimental animals.

Reproductive Effects Experiments have shown reproductive toxicity effects on laboratory animals.

| | |
|--|--|
| Developmental Effects | Developmental effects have occurred in experimental animals. Component substance is listed on California Proposition 65 as a developmental hazard. |
| Teratogenicity | Teratogenic effects have occurred in experimental animals. |
| STOT - single exposure STOT - repeated exposure | Respiratory system Central nervous system (CNS) Optic nerve Kidney Liver spleen Blood Respiratory system |
| Aspiration hazard | No information available |
| Symptoms / effects, both acute and delayed | Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause blindness: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| 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 | Pimephales promelas: LC50 > 10000 mg/L 96h | EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min | EC50 > 10000 mg/L 24h |

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

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

| Component | log Pow |
|----------------|---------|
| Methyl alcohol | -0.74 |

13. Disposal considerations

Waste Disposal Methods Should not be released into the environment.

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

14. Transport information

DOT

| | |
|-----------------------------|----------|
| UN-No | UN1230 |
| Proper Shipping Name | METHANOL |
| Hazard Class | 3 |
| Packing Group | II |

TDG

| | |
|--------------------------------|----------|
| UN-No | UN1230 |
| Proper Shipping Name | METHANOL |
| Hazard Class | 3 |
| Subsidiary Hazard Class | 6.1 |
| Packing Group | II |

IATA

| | |
|--------------------------------|----------|
| UN-No | UN1230 |
| Proper Shipping Name | METHANOL |
| Hazard Class | 3 |
| Subsidiary Hazard Class | 6.1 |
| Packing Group | II |

IMDG/IMO

| | |
|-------------------------|----------|
| UN-No | UN1230 |
| Proper Shipping Name | METHANOL |
| Hazard Class | 3 |
| Subsidiary Hazard Class | 6.1 |
| Packing Group | II |

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|----------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Methyl alcohol | X | X | - | 200-659-6 | - | | X | X | X | X | X |

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) 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 commenced PMN 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(B)).

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 % |
|----------------|---------|----------|-------------------------------|
| Methyl alcohol | 67-56-1 | 100 | 1.0 |

SARA 311/312 Hazardous Categorization

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | Yes |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act Not applicable

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|----------------|-----------|-------------------------|-------------------------|
| Methyl alcohol | X | | - |

OSHA Occupational Safety and Health Administration

Not applicable

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 |
|----------------|--------------------------|----------------|
| Methyl alcohol | 5000 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 |

State Right-to-Know

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|----------------|---------------|------------|--------------|----------|--------------|
| Methyl alcohol | 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

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR

WHMIS Hazard Class B2 Flammable liquid
 D1A Very toxic materials
 D2A Very toxic materials



16. Other information

Prepared By Regulatory Affairs
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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 on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS