# MATERIAL SAFETY DATA SHEET

Product Name: Plus Alcohol 100%

Product Code: 7100-1

## 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

**Product Identifier:** Custom Blend
**Synonyms:** StatLabs Alcohol Blend
**Other means of identification:** UN1987
**Recommended use of the chemical and restrictions on use:**
Histology, Cytology, and General Use Reagent

**Supplier Details:**
**StatLab Medical Products**
2090 Commerce Dr
McKinney, TX 75069
USA
Tel: 972.436.1010
Fax: 972.436.1369

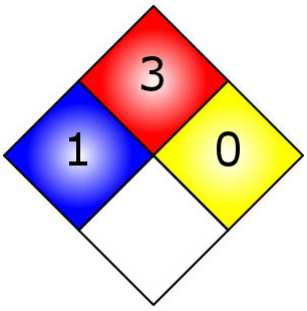
**Emergency Contact:** **CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)**

## 2. HAZARDS IDENTIFICATION

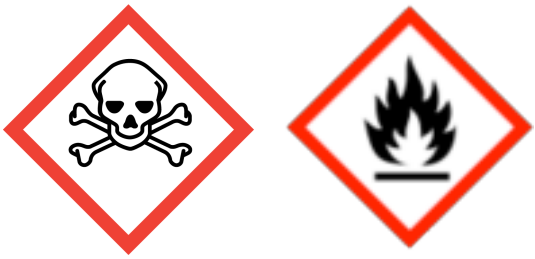
**OSHA Hazards:**
Flammable liquid, Irritant, Target organ effect, Toxic by ingestion, Toxic by skin absorption

**Target Organs:**
Central nervous system, Eyes, Kidney, Liver

**NFPA**




**GHS label elements, including precautionary statements**



**Signal Word:**
DANGER!

**Hazard statement(s)**

| | |
|---|---|
| H225 | Highly flammable liquid and vapor. |
| H301 + H311 | Toxic if swallowed or in contact with skin. |
| H315 | Causes skin irritation. |
| H331 | Toxic if inhaled |

**Precautionary statement(s)**

| | |
|---|---|
| P263 | Avoid contact during pregnancy/while nursing. |
| P501 | Dispose of contents and container to an approved waste disposal plant. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P270 | Do not eat, drink or smoke when using this product. |
| P240 | Ground/bond container and receiving equipment. |
| P307 + P311 | IF exposed: Call a POISON CENTER or doctor/ physician. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or a doctor/ physician. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |

| | |
|---|---|
| P210 | Keep away from heat, sparks, open flames, and hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P322 | Specific measures (see first aid measures on this label) |
| P321 | Specific treatment (see supplemental first aid instructions on this label). |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P243 | Take precautionary measures against static discharge. |
| P241 | Use explosion-proof electrical, ventilating, and lighting equipment. |
| P242 | Use only non-sparking tools. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P264 | Wash hands thoroughly after handling. |
| P280 | Wear protective gloves and eye and face protection. |

**GHS Classification(s)**
Acute Toxicity, Dermal (Category 3)
Acute Toxicity, Inhalation (Category 3)
Acute Toxicity, Oral (Category 3)
Flammable Liquids (Category 2)
Specific target organ toxicity - single exposure (Category 1)
Specific target organ toxicity - single exposure (Category 2)

**Other hazards which do not result in classification:**

**Potential Health Effects:**

| Organ | Description |
|---|---|
| Eyes | Causes eye irritation. |
| Ingestion | Toxic if swallowed. |
| Inhalation | Can be harmful, causing irritation to the respiratory tract, if inhaled. |
| Skin | Toxic if absorbed through skin. Irritating to the skin. |

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

| | |
|---|---|
| **Chemical identity:** | Plus 100% Alcohol |
| **Common name / Synonym:** | Methanol, Methyl Alcohol; Isopropanol, Isopropyl Alcohol |
| **CAS number:** | N/A |
| **EINECS number:** | N/A |
| **ICSC number:** | N/A |
| **RTECS #:** | N/A |
| **UN #:** | 1987 |
| **EC #:** | N/A |

| % Weight | Material | CAS |
|---|---|---|
| 60 | Isopropyl Alcohol | 67-63-0 |
| 40 | Methyl Alcohol | 67-56-1 |

## 4. FIRST AID MEASURES

**General advice**

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Skin**

Wash skin with soap and copious amounts of water. Seek medical attention.

**Inhalation**

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

**Eyes**

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

**Ingestion**

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

## 5. FIRE FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):**

Carbon oxides expected to be the primary hazardous combustion product.

**Special protective equipment and precautions for firefighters:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

**Flammable Properties**

**Classification**

OSHA/NFPA Class IB Flammable Liquid.

**Flash point**

11 °C (52 °F) - Closed Cup

**Autoignition temperature**

399 °C (750 °F)

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Wear respiratory protection. Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Environmental precautions:**

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

**Methods and materials for containment and cleaning up:**

Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:**

Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

**Conditions for safe storage, including any incompatibilites:**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters, e.g., occupational exposure limit values or biological limit values:**

**Occupational Exposure Limits**

| Component | Source | Type | Value | Note |
|---|---|---|---|---|
| Isopropyl Alcohol | US(ACGIH) | STEL | 400 ppm | |
| Isopropyl Alcohol | US (ACGIH) | TWA | 200 ppm | |
| Isopropyl Alcohol | US (OSHA) | TWA | 400 ppm | |
| Methyl Alcohol | US (ACGIH) | STEL | 250 ppm | |
| Methyl Alcohol | US (OSHA) | TWA | 200 ppm | |
| Methyl Alcohol | US (ACGIH) | TWA | 200 ppm | |

**Appropriate engineering controls:**

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

**Individual protection measures, such as personal protective equipment:**

**Respiratory protection:**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

**Skin and body protection:**

Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance *(physical state, color, etc.)*** | Liquid. Colorless, clear. |
| **Odor** | Specific data not available |
| **Odor threshold** | Specific data not available |
| **pH** | 5.0 - 7.0 |
| **Freezing point** | -113 °C (-173 °F) |
| **Initial boiling point and boiling range** | 78.3 °C (173 °F) |
| **Flash point** | 11 °C (52 °F) - Closed Cup |
| **Evaporation rate** | Specific data not available |
| **Flammability (solid, gas)** | Flammable |
| **Upper / Lower flammability or explosive limits** | Upper: 36.0% (V) |
| **Vapor pressure** | 97 mmHg at 20 °C (MeOH) |
| **Vapor Density** | 1.59 |
| **Relative Density** | 0.79 g/mL at 25 °C |
| **Solubility(ies)** | Completely Miscible |
| **Partition coefficient n-octanol/water(ies)** | Specific data not available |
| **Auto-ignition temperature** | 399 °C (750 °F) |
| **Decomposition temperature** | Specific data not available |

| | |
|---|---|
| **Formula (ISOPROPYL ALCOHOL)** | C3H8O |
| **Formula (METHYL ALCOHOL)** | CH4O |
| **Molecular Weight (ISOPROPYL ALCOHOL)** | 60.1 g/mol |
| **Molecular Weight (METHYL ALCOHOL)** | 32.04 g/mol |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability** | Stable under recommended storage conditions. |
| **Possibility of hazardous reactions** | Vapors may form explosive mixture with air. |
| **Conditions to avoid (e.g., static discharge, shock or vibration)** | Heat, flames, and sparks. Extreme temperatures and direct sunlight. |
| **Incompatible materials** | Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids |
| **Hazardous decomposition products** | Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products. |

## 11. TOXICOLOGICAL INFORMATION

Methyl Alcohol 67-56-1

**Product Summary:**
Classification of teratogenicity or reproductive toxicity cannot be determined with available data for this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

**Acute Toxicity:**

| | | | |
|---|---|---|---|
| LC50 Inhalation | Rat | 128.2 mg/L | 4 h |
| LC50 Inhalation | Rat | 87.6 mg/L | 6 h |
| LD50 Dermal | Rabbit | 17,100 mg/kg | |
| LD50 Oral | Rat | 1,187 -2,769 mg/kg | |
| LDlo Oral | Human | 143mg/kg | Signs and symptoms of dyspnea and gastrointestinal disturbances such as nausea, vomiting, and diarrhea. |

**Irritation:**

**Eyes**
Rabbit - no eye irritation

**Respiratory or Skin Sensitization**
Maximization Test - Guinea Pig - Sensitization not displayed in laboratory animals when following OECD Test Guideline 406.

**Skin**
No data available

**Germ cell mutagenicity**
Genotoxicity in vitro - in vitro assay - S. typhimurium - with and without metabolic activation - negative

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
May cause damage to organs

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Other Hazards**

| Organ | Description |
|---|---|
| Eyes | Direct contact with the eyes produces a mild, reversible irritation, assuming treatment is initiated promptly. |
| Ingestion | Toxic. Can be fatal or cause blindness through ingestion. Ingestion may cause gastrointestinal disturbances such as nausea, vomiting, and diarrhea. |
| Inhalation | Toxic by inhalation. Vapor harmful. Can cause irritation to the respiratory tract. |
| Skin | Toxic in contact with skin. Irritating to skin. |

Isopropyl Alcohol 67-63-0

**Product Summary:**
Long-term exposure (2 years) to Isopropyl Alcohol via inhalation at concentrations up to 5000 ppm caused no exposure related increases in tumors in animals. No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

**Acute Toxicity:**

| | | | |
|---|---|---|---|
| LC50 Inhalation | Rat | 16,000 mg/kg | 8 hours |
| LD50 Dermal | Rabbit | 12,800 mg/kg | |
| LD50 Oral | Rat | 5045 mg/kg | Behavioral abnormalities observed such as altered sleep time and decreased activity. |

**Irritation:**
**Eyes**

Rabbit - Irritating to eyes - 24 hours

**Eyes (ISOPROPANOL)**
Mildly irritating to the eye at an airborne concentration of 400 ppm, unpleasant at 800 ppm.

**Respiratory or Skin Sensitization**
No data available

**Skin**
Rabbit- mild skin irritation

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
Inhalation - May cause drowsiness or dizziness. - Central Nervous System

**Carcinogenicity**
IARC: Group 3: Not classifiable as to its carcinogenicity to humans.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Other Hazards**

| Organ | Description |
|---|---|
| Eyes | Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury |
| Ingestion | Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. |
| Inhalation | Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Causes upper respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has caused poisoning. |
| Skin | May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. May be absorbed through intact skin. Dermal absorption has been considered toxicologically insignificant. |
| Chronic | Prolonged exposure can be irritating to mucous membranes, skin, and the respiratory system. Can cause liver and kidney damage. |

## 12. ECOLOGICAL INFORMATION

- Isopropyl Alcohol 67-63-0

**Ecotoxicity (aquatic and terrestrial, where available):**
**Acute Fish Toxicity (ISOPROPANOL)**
LC50 / 96 hours Pimephales promelas: 9,640 mg/L

**Toxic to Daphnia and Other Aquatic Invertebrates**
EC50 / 24 h / Water Flea - 5,102 mg/L

**Toxicity to Aquatic Plants (ISOPROPANOL)**
EC50 / 72 hours Desmodesmus subspicatus > 2,000 mg/L

**Toxicity to Daphnia and other aquatic invertibrates**
Immobilization EC50 / 24h / Water flea - 6,851 mg/L

**Persistence and degradability:**
No data available

**Bioaccumulative potential:**
No data available

**Other adverse effects:**
No data available

- Methyl Alcohol 67-56-1

**Ecotoxicity (aquatic and terrestrial, where available):**
**Acute Fish Toxicity (METHANOL)**
LC50 / 96 hours Lepomis macrocirus: 15,400 mg/L / LC50 / 96 hours Fathead minnow: 29,400 mg/L

**Toxicity to Aquatic Plants (METHANOL)**
EC50 / 96 hours Scenedesmus capricornutum: 22,000 mg/L

**Toxicity to daphnia and other aquatic invertebrates**
EC50/ 48 hours / Water flea - > 10,000.00 mg/L

**Persistence and degradability:**
72% - Readily biodegradable.

**Bioaccumulative potential:**
Bioaccumulation: Carp / 72d / BCF: 1.0

**Other adverse effects:**
BOD: 600 mg/g - 1120 mg/g COD: 1420 mg/g

## 13. DISPOSAL CONSIDERATIONS

**Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:**

Vapors may collect in empty containers. Treat empty containers as hazardous. Dispose of spill-clean up and other wastes in accordance with federal, state, and local regulations.

## 14. TRANSPORT INFORMATION

**Description of waste residues and information on their safe handling and methods of disposal:**

| | |
|---|---|
| **UN number** | 1987 |
| **UN proper shipping name** | Alcohols, N.O.S. (Isopropanol, Methanol) |
| **Transport hazard class(es)** | 3 |
| **Packing group *(if applicable)*** | II |

**IMDG**
UN-Number: 1987 Class: 3 Packing Group: II
EMS-No: F-E, S-D
Proper shipping name: Alcohols, N.O.S. (Methanol, Isopropanol)
Marine pollutant: No
**IATA**
UN-Number: 1987 Class: 3 Packing Group: II
Proper shipping name: Alcohols, N.O.S. (Isopropanol, Methanol)

## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations specific for the product in question:**

**OSHA Hazards**
Flammable liquid, Irritant, Target organ effect, Toxic by ingestion, Toxic by skin absorption

All ingredients are on the following inventories or are exempted from listing

| Country | Notification |
|---|---|

| | |
|---|---|
| Australia | AICS |
| Canada | DSL |
| China | IECS |
| European Union | EINECS |
| Japan | ENCS/ISHL |
| Korea | ECL |
| New Zealand | NZIoC |
| Philippines | PICCS |
| United States of America | TSCA |

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA title III, Section 313: METHANOL (CAS# 67-56-1) Revision date 2007-07-01.

**SARA 311/312 Hazards**
Acute Health Hazard
Chronic Health Hazard
Fire Hazard

**CERCLA**
No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

**Massachusetts Right To Know Components**
Isopropyl Alcohol CAS-No. 67-63-0 Revision Date 1987-01-01

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

**Pennsylvania Right To Know Components**
Isopropyl Alcohol CAS-No. 67-63-0 Revision Date 1987-01-01

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

**New Jersey Right To Know Components**
Isopropyl Alcohol CAS-No. 67-63-0 Revision Date 1987-01-01

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

**California Prop 65 Components**
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. METHANOL CAS-No. 67-56-1 Revision Date 2012-03-16

## 16. OTHER INFORMATION:
## INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

**Disclaimer**
StatLab Medical Products believes that the information on this SDS was obtained from reliable sources. However, information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, StatLab Medical Products does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable. Information is correct to the best of our knowledge at the date of the SDS publication.