Section 1: Identification

(a) Liquid Tissue
(b) Accessory Embalming Chemical
(c) For use by professional licensed embalmers only
(d) Manufacturer: TNPC – 4722 Bronze Way – Dallas, TX 75236 – 214.333.4230
(e) Privately labeled for & distributed by: Pierce Companies – 4722 Bronze Way – Dallas, TX 75236 – 214.333.4230
(f) Emergency Phone Number: 800.424.9300

Section 2: Hazard Identification

(a) **OSHA/HCS status:** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
(b) **DANGER!** Flammable Liquid and Vapor; Pungent odor
(c) **DANGER!** Contains Methanol - Poison. Vapor Harmful. May be fatal or cause blindness if swallowed. Prolonged and repeated skin contact can cause death or blindness. Causes respiratory tract irritation. Harmful if inhaled or absorbed through skin. May cause allergic respiratory and skin reaction.

Section 3: Composition/Information on Ingredients

CHEMICAL NAME	CAS NUMBER	%	
Methanol **	67-56-10	45 – 50	Trade Secret Information: Exact % of concentration is withheld to protect Trade Secret Information. Ranges are given in accordance with CFR 29 1910.1200(i), Appendix E
Isopropyl Alcohol	67-63-0	1 – 10	
Nitrocellulose	9004-70-0	1 - 10	

Section 4: First-Aid Measures

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Chemical burns must be treated promptly by a physician. Get medical attention immediately.
Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Remove contaminated, soaked clothing immediately and dispose of safely. Get medical attention immediately.
Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth respiration. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when

the inhaled material is toxic, infectious or corrosive. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Seek immediate medical attention.
Ingestion: Wash out mouth with water. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Protection of first aid personnel: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. If it is suspected that dust, vapor, mist or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

Section 5: Fire-fighting Measures

NFPA: Health: 3 Flammability: 3 Instability: 0
Flammability of product: Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Suitable extinguishing media: Dry chemical, Carbon dioxide (CO2), Aqueous film forming foam, Foam
Extinguishing media which must not be used for safety reasons: Do not use a solid water stream as it may scatter and spread fire
Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon monoxide, carbon dioxide (CO2).
Special protective equipment for fire-fighters: Self-contained breathing apparatus (EN 133)
Environmental precautions: Dike and collect water used to fight fire.
Other information: Cool containers/tanks with water spray
Special Remarks on Fire Hazards: Explosive in the form of vapor when exposed to heat or flame. Vapor is heavier than air and may settle in low places or spread long distances to source of ignition and flash back. Explosive atmospheres may linger. Closed containers can rupture and release toxic vapors or decomposition products. Keep away from sources of ignition – No smoking. Take necessary action to avoid static electricity discharge. Ground and bond containers when transferring material. Keep away from heat, sparks and flames. **Never puncture metal tab with a metal object. Under certain atmospheric conditions a static electrical charge can ignite flammable vapors from contents of plastic bottles.**

Section 6: Accidental Release Measures

Personal Precautions: Do not breathe vapors, aerosols. Do not get in eyes, on skin, or on clothing. Keep away from heat and sources of ignition. Provide adequate ventilation. Keep unnecessary people away; isolate hazard area and deny entry.
Environmental precautions: Prevent further leakage or spillage. Do not discharge into the drains/surface waters/ground water.
Methods for cleaning up: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Dispose of in accordance with all local, state and federal regulations. Contaminated equipment (brushes, rags) must be cleaned immediately with water. Remove all sources of ignition. Keep people away from and upwind of spill/leak.
Authority notification: Within the United States, call the National Response Center (800.424.8802) and appropriate state and local authorities if the quantity released over 24 hours is equal to or greater than the reportable quantity.

Section 7: Handling and Storage

Handling: Provide sufficient air exchange and/or exhaust in work rooms. Handle in accordance with good industrial hygiene and safety practice. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not breathe vapors/dust. Always

open containers slowly to allow any excess pressure to vent. Decontaminate soiled clothing properly before re-use. Destroy contaminated leather clothing.
Protection-fire and explosion: Keep away from heat, sparks and flames. Keep away from sources of ignition – no smoking. Take necessary precaution to avoid static electricity discharge. Ground and bond containers when transferring material. In case of fire, emergency cooling with water spray should be available. **Never puncture metal tab with a metal object. Under certain atmospheric conditions, a static electrical charge can ignite flammable vapors from contents of plastic bottles.**
Technical measures/Storage Conditions: Keep tightly closed in a dry, cool and well-ventilated place. Handle and open container with care. Take measures to prevent the build up of electrostatic charge.
Incompatible products: Keep away from acids, bases, amines, oxygen, oxidizing agents, reducing agents

Section 8: Exposure Controls/Personal Protection

CHEMICAL NAME	CAS NUMBER	PEL OSHA	TLV-ACGIH
Methanol **	67-56-10	200 ppm TWA 250 ppm STEL	200 ppm TWA 250 ppm STEL
Isopropyl Alcohol	67-63-0	400 ppm	400 ppm 260 mg/m^3
Nitrocellulose	9004-70-0	No information	No information

Exposure controls
Engineering controls: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
Skin protection
Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Examples of acceptable glove barrier materials include: Polyvinyl alcohol ("PVA"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Other protection: Wear clean, body-covering clothing.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.

The following should be effective types of air-purifying respirators: Organic vapor cartridge.

Section 9: Physical and chemical properties

FLASH POINT: 54ºF (ASTM D93)
BOILING POINT: 142ºF
EVAPORATION RATE (ETHYL ACETATE=1): > 1
MELTING POINT: No information
pH: 10.07
SOLUBILITY IN WATER: Not Soluble
FLAMMABLE LIMITS: LEL=6% UEL=76%
SPECIFIC GRAVITY (WATER=1): .818 g/ml @70º
VAPOR DENSITY (AIR=1): 1.1
VAPOR PRESSURE (mm HG): 115.1 mm Hg @ 72ºF
% VOLATILE BY WEIGHT: > 100
APPEARANCE AND ODOR INFORMATION: Transparent liquid/peach w/alcohol odor

Section 10: Stability and Reactivity

UNSTABLE: NO **STABLE: YES**

CONDITIONS TO AVOID: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid static discharge

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents, caustics, strong alkalies and inorganic acids.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: carbon dioxide, carbon monoxide
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID FOR POLYMERIZATION: Not applicable

Section 11: Toxicological Information

Methanol

Acute oral toxicity	LD50: > 5000 mg/kg
Acute dermal toxicity	LD50: > 5000 mg/kg
Acute inhalation toxicity	LC50 (4h): > 5 mg/l
Skin corrosion / irritation	irritating
Skin sensitization	nonsensitizer
Species	guinea pig
Method	Maximization
Serious eye damage/eye irritation	irritant
Species	rabbit eye
Carcinogenic effects	No evidence of carcinogenicity
Species	rats
Study	inhalation lifetime study
Carcinogenic effects	No evidence of carcinogenicity
Species	Mice
Study	inhalation lifetime study
In vitro Mutagenicity	Ames Test: Negative – with and without metabolic activation – Method: OECD 471 Mouse lymphoma cell gene-mutation: positive – with and without metabolic activation – method: OECD 471 In Vitro Sister Chromatid Exchange Assay in Chinese Hamster Ovary (CHO): negative – with and without metabolic activation – Method: OECD 479 in vitro Mammalian cell transformation Test: Negative – without metabolic activation – EU-Method B.21
In vivo Mutagenicity	Positive and negative results
Reproductive toxicity	Some indication of reproductive toxicity in animals at non-physiological levels
Developmental effects	Some indication of developmental toxicity in animals at non-physiological levels

Isopropyl Alcohol
Toxicological information on this product or its components appear in this section when such data is available.

Acute toxicity

Acute oral toxicity
Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. May cause central nervous system depression. May cause nausea and vomiting. Signs and symptoms of excessive exposure may include: Facial flushing. Low blood pressure. Irregular heartbeats.

LD50, Rat, 5,840 mg/kg OECD 401 or equivalent
Lethal Dose, Humans, 100 ml Estimated.

Acute dermal toxicity
Prolonged skin contact is unlikely to result in absorbption of harmful amounts.

LD50, Rabbit, > 12,800 mg/kg

Acute inhalation toxicity
With good ventilation, single exposure is not likely to be hazardous. In poorly ventilated areas, vapors or mists may accumulate and cause respiratory irritation. Prolonged excessive exposure may cause adverse effects. Excessive exposure (400 ppm) to isopropanol may cause eye, nose and throat irritation. Incoordination, confusion, hypotension, hypothermia, circulatory collapse, respiratory arrest and death may follow a longer duration or higher levels. Observations in animals may include middle ear lining damage upon exposure to vapors of isopropanol. However, the relevance of this to humans is unknown.

LC50, Rat, male and female, 6 Hour, vapour, > 10000 ppm

Skin corrosion/irritation
Prolonged exposure not likely to cause significant skin irritation.
May cause drying and flaking of the skin.

Serious eye damage / eye irritation
May cause pain disproportionate to the level of irritation to eye tissues.
May cause moderate eye irritation.
May cause moderate corneal injury.
Vapor may cause eye irritation experienced as mild discomfort and redness.
Vapor may cause lacrimation (tears).

Sensitization
Did not demonstrate the potential for contact allergy in mice.
Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systematic Toxicity (Single Exposure)
May cause drowsiness or dizziness.
Route of Exposure: Ingestion

Target Organs: Central nervous system

Specific Target Organ Systemic Toxicity (Repeated Exposure)
In animals, effects have been reported on the following organs:
Kidney
Liver
Kidney effects have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.
Observations in animals include:
Lethargy.

Carcinogenicity
Did not cause cancer in laboratory animals.

Teratogenicity
Isopropanol has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Reproductive toxicity
In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

Mutagenicity
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Aspiration Hazard
May be harmful if swallowed and enters airways.

Section 12: Ecological Information

Methanol

Acute fish toxicity	LC50: 28 g/l (96h)
Species	Pimephales promelas (fathead minnow)
Methanol	Flow-through
Chronic fish toxicity	Chronic fish toxicity
	LC50: 15.4 g/l (96h)
Species	Lepomis macrochirus (Bluegill sunfish)
Method	Flow-through
Acute daphnia toxicity	EC50: 24.5 g/l (48h)
Species	Daphnia magna
Toxicity to aquatic plants	EC50: 7.1 mg/l (48h)
Species	Selenastrum capricornutum (green algae)
Biodegradation	48%
	(5d)
Bioconcentration factor (BCF)	Bioconcentration factor (BCF)
Bioaccumulation	Bioaccumulative potential – low
Other potential hazard	The substance does not meet the criteria for PBT / vPvB according to REACH, Annex XIII

Isopropyl Alcohol
Ecotoxicological information on this product or its components appear in this section when such data is available.

Toxicity

Acute toxicity to fish
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50?LL50>100 mg/L in the most sensitive species tested).

LC50, Pimephales promelas (fathead minnow), flow-through test, 96 Hour, 9,640 mg/l, OECD Test Guideline 203 or equivalent

Acute toxicity to aquatic invertebrates
LC50, Daphnia magna (Water flea), static test, 24 hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants
NOEC, alga Scenedesmus sp., static test, 7 d, Growth inhibition (cell density reduction), 1,800 mg/l

ErC50, alga Scenedesmus sp., static test, 72 Hour, Growth rate inhibition, > 1,000 mg/l

Chronic aquatic toxicity
Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna (Water flea), semi-static test, 21 d, 30 mg/l

Persistence and degradability

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10 day Window: Pass
Biodegradation: 95%
Exposure time: 21 d
Method: OECD Test Guideline 301E or Equivalent
10 day Window: Pass
Biodegradation: 53%
Exposure time: 5 d
Method: Other guidelines

Theoretical Oxygen Demand: 2.40 mg/mg
Chemical Oxygen Demand: 2.09 mg/mg

Biological oxygen demand (BOD)

Incubation time	BOD
5 d	20 – 72 %
20 d	78 – 86%

Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitizer: OH radicals
Atmospheric half-life: 1.472 d
Method: Estimated

Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water (log Pow): 0.05 Measured

Mobility in soil

Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient (Koc): 1.1 Estimated.

Section 13: Disposal Considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

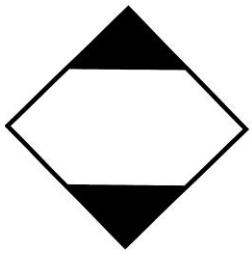
Dispose of spilled material in accordance with state and local regulations for hazardous waste. Recommended methods are incineration or biological treatment at a federally or state-permitted disposal facility. Note that this information applies to the material as manufactured; processing, use or contamination may make this information inappropriate, inaccurate, or incomplete.

Note that this handling and disposal information may also apply to empty containers, liners and rinsate. State or local regulations or restrictions are complex and may differ from federal regulations. This information is intended as an aid to proper handling and disposal; the final responsibility for handling and disposal is with the owner of the waste.

Empty bottles: DO NOT RECYCLE!

Section 14: Transport Information

DOT/UN HAZARD CLASSIFICATION: N/A



Section 15: Regulatory Information

WHMIS (Canada) Status: controlled
WHMIS (Canada) Hazard Classification: B/2, D/1/B

SARA 311-312 Hazard Classification(s):
Immediate (acute) health hazard
Delayed (chronic) health hazard
Fire hazard

Sara 313: None, unless listed below

METHANOL
Carcinogenicity Classification (components present at 0.1% or more) :
None, unless listed blow

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL or otherwise complies with CEPA new substances notification requirements.

EINECS (European Inventory of Existing Commercial Chemical Substances):
This product is listed on EINECS.
EINECS Number: 200-659-6
AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme):
This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and new Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

Isopropyl Alcohol
OSHA Hazard Communication Standard
This product is a "Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Fire Hazard
Acute Health Hazard
Chronic Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-To-Know Act of 1986) Section 313

Components	**CAS RN**
Isopropanol	67-63-0

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103
This product contains the following substances which are subject to CERCLA Section 103 reporting requirements and which are listed in 40 CFR 302.4.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List
The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Components	**CAS RN**
Isopropanol	67-63-0

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Section 16: Other Information

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
STEL	Short-term exposure limit
TWA	8-hour, time-weighted average

Information Source and References
This SDS is prepared by Pierce Companies Regulatory Department referencing the SDS from the Manufacturers who supply the hazardous ingredients in our finished product.

Hazardous Material Information System III (USA)

Health:	3
Flammability:	3
Physical Hazards:	0

National Fire Protection Association (USA)

Health:	3
Flammability:	3
Instability:	0

HMIS ratings are based on a 0-4 scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS ratings are not required on Safety Data Sheets under 29 CFT 1910.1200, the preparer may choose to provide them. HMIS ratings are to be used with a fully implemented HMIS program. HMIS is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by: **Pierce Companies Regulatory Department**
Date of Preparation/Revision: **October 19, 2017**

Notice: *The information provided herein was believed by Pierce Companies ("Pierce") to be accurate at the time of preparation or prepared from sources believed to be reliable, accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exit. It is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. Pierce makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards. All products supplied by Pierce are subject to Pierce's terms and conditions of sale. PIERCE MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY PIERCE, except that the product shall conform to Pierce's specifications. Nothing contained herein constitutes an offer for the sale of any product. Safety Data Sheets are provided on the Internet by Pierce as a service to its customers. Possession of a Safety Data Sheet does not indicate that the possessor of the Safety Data Sheet was a purchaser or user of the subject product.*