

SAFETY DATA SHEET

Preparation Date: 6/17/2015

Revision Date: 4/18/2017

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: CO120
Product Name: COLLODION, USP

Other means of identification

Synonyms: No information available
CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000.

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person: Martin LaBenz (West Coast)

Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed
 Causes skin irritation
 Causes serious eye irritation
 May damage fertility or the unborn child
 May cause respiratory irritation. May cause drowsiness or dizziness

Causes damage to organs through prolonged or repeated exposure
Extremely flammable liquid and vapor



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Tends to form explosive peroxides when exposed to air, light and evaporated to dryness

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
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
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

In case of fire: Use CO₂, dry chemical, or foam to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Ethyl Ether	60-29-7	69-73
Ethyl Alcohol 190 proof	64-17-5	22-26
Pyroxylin	9004-70-0	5

4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes serious eye irritation. Causes skin irritation. May cause irritation of respiratory tract. Central nervous system effects. Dizziness. Drowsiness. anesthetic. May damage fertility or the unborn child. May affect the liver. May affect the cardiovascular system. It may cause dermatitis. May cause anorexia. May affect respiration.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician:	Treat symptomatically.
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Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	Carbon dioxide (CO ₂). Dry chemical. Alcohol-resistant foam. Water spray.
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Unsuitable Extinguishing Media:	Do not use a solid (straight) water stream as it may scatter and spread fire.
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Specific hazards arising from the chemical

Hazardous Combustion Products:	Carbon oxides
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Hazardous Combustion Products:	No information available.
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Specific hazards:	Extremely Flammable. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Burns with smokey greenish flame. Violent reaction or ignition on contact with halogens (e.g., bromine, chlorine), interhalogens (e.g., iodine heptafluoride), oxidants (e.g., silver perchlorate, nitrosyl perchlorate, nitryl perchlorate, chromyl chloride, fluorine nitrate, permanganic acid, nitric acid, hydrogen peroxide, peroxodisulfuric acid, iodine (VII) oxide, sodium peroxide,
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ozone, and liquid air), sulfur and sulfur compounds (e.g., sulfur when dried with peroxidized ether, sulfuryl chloride).
(Ethyl ether)

Tends to form explosive peroxides under influence of light and air and when evaporated to dryness.

Explosive reaction with boron triazide, bromine trifluoride, bromine pentafluoride, perchloric acid, uranyl nitrate + light, wood pulp extracts + heat.

Only electrical equipment of explosion proof type (group C classification) is permitted to be operated in ether areas.

May explode when brought in contact with anhydrous nitric acid. (Ethyl ether).

Special Protective Actions for Firefighters

Specific Methods:

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

Special Protective Equipment for Firefighters:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing.

Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

- Acids
- Alkalis
- Bases
- Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Ethyl Ether	60-29-7	400 ppm TWA 1200 mg/m ³ TWA	None	500 ppm STEL 400 ppm TWA	None
Ethyl Alcohol 190 proof	64-17-5	1000 ppm TWA 1900 mg/m ³ TWA	1000 ppm TWA 1900 mg/m ³ TWA	1000 ppm STEL	None
Pyroxylin	9004-70-0	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Ethyl Ether	60-29-7	400 ppm TWA 1210 mg/m ³ TWA 500 ppm STEL 1520 mg/m ³ STEL	400 ppm TWA 500 ppm STEL	400 ppm TWA 500 ppm STEL	400 ppm TWAEV 1210 mg/m ³ TWAEV 500 ppm STEV 1520 mg/m ³ STEV
Ethyl Alcohol 190 proof	64-17-5	1000 ppm TWA 1880 mg/m ³ TWA	1000 ppm STEL	1000 ppm STEL	1000 ppm TWAEV 1880 mg/m ³ TWAEV
Pyroxylin	9004-70-0	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Ethyl Ether	60-29-7	500 ppm STEL 1520 mg/m ³ STEL 400 ppm TWA 1210 mg/m ³ TWA	400 ppm TWA 1200 mg/m ³ TWA 500 ppm STEL 1500 mg/m ³ STEL
Ethyl Alcohol 190 proof	64-17-5	1000 ppm TWA 1880 mg/m ³ TWA	1000 ppm TWA 1900 mg/m ³ TWA
Pyroxylin	9004-70-0	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles
Skin and body protection:	Chemical resistant apron Gloves Long sleeved clothing
Respiratory protection:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: Viscous.	Color: Clear. Colorless to pale yellow.
Odor: Ethereal.	Taste No information available.	Formula: No information available
Molecular/Formula weight: No information available	Flammability: No information available	Flashpoint (°C/°F): -45°C/-49°F
Flash Point Tested according to: Closed cup	Autoignition Temperature (°C/°F): The lowest known value is 180°C/356°F (Ethyl ether)	Lower Explosion Limit (%): 1.9
Upper Explosion Limit (%): 36	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 36.111°C/97°F	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 0.765-0.775	pH: Neutral	Vapor pressure @ 20°C (kPa): The highest known value is 58.6 kPa (@ 20°C) (Ethyl ether). Weighted average: 44.5 kPa (@ 20°C)
Evaporation rate: No information available	Vapor density: >1	VOC content (g/L): No information available
Odor threshold (ppm): The highest known value is 100 ppm (Ethyl alcohol 200 Proof) Weighted average: 22.87 ppm	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Very slightly soluble in cold water	

10. STABILITY AND REACTIVITY

Reactivity

Ethyl Ether:

Air and light sensitive. Also incompatible with bromoazide, chlorine, chlorine trifluoride, chromic anhydride, chromyl chloride, lithium aluminum hydride, nitrosyl perchlorate, nitryl perchlorate, ozone, perchloric acid, permanganates, sulfuric acid, potassium peroxide, sodium peroxide, triethyl aluminum trimethyl aluminum, bromine, iodine heptafluoride, silver perchlorate, fluorine nitrate, permanganic acid, nitric acid, hydrogen peroxide, peroxodisulfuric acid, iodine (VII) oxide, peat soils, thiotriazolyl perchlorate, sulfonyl chloride, sulfur, uranyl nitrate, acetyl peroxide, and wood pulp extracts.

Can react vigorously with acetyl peroxide, air, bromoazide, ClF₃, CrO₃, Cr(OCi)₂, LiAlH₂, NOClO₄, O₂, NClO₂, (H₂SO₄ + permanganates), K₂O₂, [(C₂H₅)₃Al + air], [(CH₃)₃Al + air].

Ethyl Alcohol:

Ethanol rapidly absorbs moisture from the air.

Can react vigorously with oxidizers.

The following oxidants have been demonstrated to undergo vigorous/explosive reaction with ethanol: barium perchlorate, bromine pentafluoride, calcium hypochlorite, chlorate, chloryl perchlorate, chromium trioxide, chromyl chloride, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, nitric acid, nitrosyl perchlorate, perchloric acid, permanganic acid, peroxydisulfuric acid, potassium dioxide, potassium perchlorate, potassium permanganate, ruthenium(VIII) oxide, silver perchlorate, silver peroxide, uranium hexafluoride, uranyl perchlorate, chlorine.

Ethanol can react vigorously/explosively with the following: acetyl bromide (evolves hydrogen bromide), acetyl chloride, aluminum sesquibromide ethylate, ammonia + silver nitrate (forms silver nitride and silver fulminate), isocyanates, halogens, hydrazine, caustics (ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), acid anhydrides, ammonia or hydrazine + silver (I) oxide, chlorate, chromic anhydride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, hydrogen peroxide + sulfuric acid, iodine + phosphorus (forms ethane iodide), iodine + methanol + mercuric oxide, magnesium perchlorate (forms ethyl perchlorate), manganese perchlorate + 2,2-dimethoxy propane, perchlorates, chromates, permanganates + sulfuric acid, potassium superoxide, potassium tert-butoxide, silver + nitric acid (forms silver fulminate), silver nitrate (forms ethyl nitrate), sodium hydrazide, sulfuric acid + sodium dichromate, tetrachlorosilane + water, mercuric nitrate, acetic anhydride + sodium hydrosulfate, disulfuric acid + nitric acid, phosphorous (III) oxide, potassium tert-butoxide + acids, alkali metals (liberates flammable hydrogen gas).

Ethanol is also incompatible with platinum, and sodium (liberates flammable hydrogen gas).

No really safe conditions exist under which ethyl alcohol and chlorine oxides can be handled.

Reacts vigorously with acetyl chloride.

It can react with freshly cut/etched/scratched aluminum (evolution of heat and release hydrogen gas). The Ethyl alcohol has to be on the aluminum surface as it is being cut/scratched/etched.

Note: This mixture can be incompatible with amines.

Chemical stability

Stability: Tends to form explosive peroxides when exposed to air and light. Avoid allowing Nitrocellulose resin to become dry and avoid friction and impact to any quantity of dry resin. Dry nitrocellulose resin is extremely flammable and burns explosively and is friction and impact sensitive.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials. Exposure to moisture.

Incompatible Materials: Acids
Alkalis
Bases
Oxidizing agents

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Eyes. Ingestion. Inhalation. Skin.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 1601 mg/kg

Product code: CO120

Product name: COLLODION, USP

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Component Information

Ethyl Ether
CAS-No. 60-29-7

LD50/oral/rat = 1215 mg/kg Oral LD50 Rat
LD50/oral/mouse = 1760 mg/kg
LD50/dermal/rabbit = >20 mL/kg Dermal LD50 Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = 32000 ppm 4 hr
LC50/inhalation/mouse = 130000 mg/m³ 3 hr
31000 ppm 30 M
Other LD50 or LC50 information = No information available

Ethyl Alcohol 190 proof
CAS-No. 64-17-5

LD50/oral/rat = 7060 mg/kg Oral LD50 Rat (for Ethyl alcohol 200 proof)
LD50/oral/mouse = 3450 mg/kg (for Ethyl alcohol 200 proof)
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = 124.7 mg/L Inhalation LC50 Rat 4 h (for Ethyl alcohol 200 proof)
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = For Ethyl Alcohol 200 proof:
>60000 ppm Inhalation LC50 Mouse 1 h
5900 mg/m³Inhalation LC50 Rat 6 h
20000 ppm Inhalation LC50 Rat 10 h
5560 mg/kg Oral LD50 Guinea Pig
6300 mg/kg Oral LD50 Rabbit

Pyroxylin
CAS-No. 9004-70-0

LD50/oral/rat = > 5 g/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation. May cause conjunctivitis.

Inhalation Irritating to respiratory system. Inhalation of high concentrations of vapors may cause dizziness or suffocation. Inhalation of high concentrations of vapor may cause anesthetic effects. Vapor mist causes irritation of the respiratory tract and mucous membranes. It may cause nausea, vomiting, excessive salivation, excessive sweating. It can affect behavior/central nervous system, cardiovascular system, respiratory system. Other symptoms may include excitement, depression, personality changes, confusion, convulsions, drowsiness, dizziness, faintness, irritability, loss of memory, headache, fatigue, slurred speech, ataxia, euphoria, anesthetic effects, possible coma, bradycardia (slow heart rate or tachycardia (fast heart rate), cardiac arrhythmias, irregular respiration or respiratory depression, coughing, bronchodilation, increase in respiratory rate.

Ingestion Harmful if swallowed. May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, gastritis, abdominal distension, loss of appetite, flushed skin, May affect behavior/central nervous system (central nervous system depression - amnesia, headache, muscular incoordination, excitation, mild euphoria, slurred speech, drowsiness, staggering gait, fatigue, changes in mood/personality, excessive talking, dizziness, ataxia, convulsions, somnolence, coma/narcosis, hallucinations, distorted perceptions, general anesthetic), peripheral nervous system (spastic paralysis) vision (diplopia), blood (changes in serum composition), liver, kidneys. Aspiration into the lungs can cause chemical pneumonitis.

Aspiration hazard No information available.

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

Chronic Toxicity Prolonged or repeated skin contact may cause dermatitis and defatting, dryness, and cracking of the skin. Prolonged or repeated ingestion or inhalation may cause loss of appetite and weight loss. Prolonged or repeated ingestion or inhalation may affect the liver.

Sensitization: No information available.

Mutagenic Effects: For Ether:
May affect genetic material
Experiments with bacteria and/or yeast have shown mutagenic effects
Animal experiments showed mutagenic effects

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Ethyl Ether	60-29-7	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Ethyl Alcohol 190 proof	64-17-5	Group 1 - Monograph 100E [2012] in alcoholic beverages Monograph 96 [2010] in alcoholic	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Not listed	Present	Not listed	Not listed

		beverages					
Pyroxylin	9004-70-0	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity May damage fertility or the unborn child

Reproductive Effects: Causes adverse reproductive effects
Developmental Effects: May cause harm to the unborn child
 May cause adverse developmental effects
Teratogenic Effects: May cause birth defects (teratogenic effects)

Specific Target Organ Toxicity

STOT - single exposure Respiratory Tract.
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Target Organs: Heart. Skin. Liver. Respiratory system. Central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Ethyl Ether - 60-29-7
Freshwater Fish Species Data: 2560 mg/L LC50 Pimephales promelas 96 h flow-through 1 10000 mg/L LC50 Lepomis macrochirus 96 h static 1

Ethyl Alcohol 190 proof - 64-17-5
Freshwater Fish Species Data: 12.0 - 16.0 mL/L LC50 Oncorhynchus mykiss 96 h static 1 100 mg/L LC50 Pimephales promelas 96 h static 1 13400 - 15100 mg/L LC50 Pimephales promelas 96 h flow-through 1

Water Flea Data: 9268 - 14221 mg/L LC50 Daphnia magna 48 h 2 mg/L EC50 Daphnia magna 48 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
 Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
 Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethyl Ether	60-29-7	None	None	None	U117 ignitable waste
Ethyl Alcohol 190 proof	64-17-5	None	None	None	None
Pyroxylin	9004-70-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2059
Proper Shipping Name: Nitrocellulose, solution, flammable
Hazard Class: 3
Subsidiary Class: No information available
Packing group: II
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: UN2059,Nitrocellulose, solution, flammable ,3,PG II

TDG (Canada)

UN-No: UN2059
Proper Shipping Name: Nitrocellulose solution, flammable
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No Information available
Description: UN2059,NITROCELLULOSE SOLUTION, FLAMMABLE,3,PG II

ADR

UN-No: UN2059
Proper Shipping Name: Nitrocellulose solution, flammable
Hazard Class: 3
Packing Group: II
Subsidiary Risk: No information available
Description: UN2059 Nitrocellulose solution, flammable,3,II

IMO / IMDG

UN-No: UN2059
Proper Shipping Name: Nitrocellulose solution, flammable
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No information available
EMS: F-E

RID

UN-No: UN2059
Proper Shipping Name: Nitrocellulose solution, flammable
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: UN2059 Nitrocellulose solution, flammable,3,II

ICAO

UN-No: UN2059
Proper Shipping Name: Nitrocellulose solution, flammable
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Description: UN2059,Nitrocellulose solution, flammable,3,PG III

IATA

UN-No: UN2059
Proper Shipping Name: Nitrocellulose solution, flammable
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 3H
Special Provisions No information available
Description: UN2059,Nitrocellulose solution, flammable,3,PG II

15. REGULATORY INFORMATION**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Ethyl Ether</i>	60-29-7	Present	Present KE-27690	Present	Present (2)-365,(2)-361	Present	Present	Present 200-467-2
<i>Ethyl Alcohol 190 proof</i>	64-17-5	Present	Present KE-13217	Present	Present (2)-202	Present	Present	Present 200-578-6
<i>Pyroxylin</i>	9004-70-0	Present XU	Present KE-25980	Present	Present (8)-176	Present	Present	Not present

U.S. Regulations*Ethyl Ether*

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0701
New Jersey (EHS) List: 0701 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
New Jersey TCPA - EHS: 10000lbTQ
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
 100 lb RQ
Louisiana Reportable Quantity List for Pollutants: 100lbfinal RQ
 45.4kgfinal RQ
California Directors List of Hazardous Substances: Present

Ethyl Alcohol 190 proof


Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0844
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present
California Directors List of Hazardous Substances: Present
FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1293

FDA - 21 CFR - Total Food Additives 169.175, 169.176, 169.177, 169.181, 172.340, 172.560, 172.580, 175.105, 176.180, 176.200, 177.1200, 177.1650, 178.1010, 184.1293, 73.30, 73.345, 73.615


Pyroxylin

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1366
Pennsylvania RTK: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**Chemicals Known to the State of California to Cause Cancer:**

 **WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Chemicals Known to the State of California to Cause Reproductive Toxicity:

 **WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Ethyl Ether	60-29-7	Not Listed	Not Listed	Not Listed	Not Listed
Ethyl Alcohol 190 proof	64-17-5	carcinogen	developmental toxicity	Not Listed	Not Listed
Pyroxylin	9004-70-0	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Ethyl Ether	60-29-7	100 lb final RQ 45.4 kg final RQ	None	None	None	None
Ethyl Alcohol 190 proof	64-17-5	None	None	None	None	None
Pyroxylin	9004-70-0	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Ethyl Ether	60-29-7	Not Applicable	01/26/199406/30/1998
Ethyl Alcohol 190 proof	64-17-5	Not Applicable	Not Applicable
Pyroxylin	9004-70-0	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Ethyl Ether
60-29-7 (69-73)

Ethyl Alcohol 190 proof
64-17-5 (22-26)

Pyroxylin
9004-70-0 (5)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 1: H224 Extremely flammable liquid and vapour.; Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.; Specific target organ toxicity - Single exposure - Category 3: H336 May cause drowsiness or dizziness.
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Category 2B: H320 Causes eye irritation.
Flammable solids - Undefined: Flammable solids - undefined category; Self-reactive substances and mixtures - Undefined: Self reactive substance - undefined category (This product is an explosive according to the TDG and it also corresponds to a Self-reactive substance according to the HPR); Combustible Dust - Category 1: May form combustible dust concentrations in air (if 5% or more by weight of its composition has a particle size <500 µm); Physical Hazards Not Otherwise Classified - Category 1: May cause an explosion under conditions of shock and/or friction

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

B2 Flammable liquid
D2B Toxic materials

Components

Ethyl Ether
Ethyl Alcohol 190 proof
Pyroxylin

WHMIS 1988
B2
B2,D2B
B4,F

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Ethyl Ether	1 %
Ethyl Alcohol 190 proof	0.1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Ethyl Ether	60-29-7	Present	Not Listed
Ethyl Alcohol 190 proof	64-17-5	Present	Not Listed
Pyroxylin	9004-70-0	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Ethyl Ether	60-29-7	Not listed
Ethyl Alcohol 190 proof	64-17-5	Not listed
Pyroxylin	9004-70-0	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethyl Ether	60-29-7	Not listed
Ethyl Alcohol 190 proof	64-17-5	Not listed
Pyroxylin	9004-70-0	Not listed

EU Classification**EU GHS - SV - CLP 172/2008**

Components	CAS-No.	EU GHS - SV - CLP (172/2008)
Ethyl Ether	60-29-7	Flammable liquids - Flam. Liq. 1: H224 Extremely flammable liquid and vapour.; Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification); Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause drowsiness or dizziness.; Supplemental Hazards: EUH019 May form explosive peroxides.; Supplemental Hazards: EUH066 Repeated exposure may cause skin dryness or cracking.603-022-00-4
Ethyl Alcohol 190 proof	64-17-5	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.603-002-00-5
Pyroxylin	9004-70-0	Explosives - Expl. 1.1: H201 Explosive; mass explosion hazard.603-037-00-6

EU - CLP (1272/2008)**R-phrase(s)**

R11 - Highly flammable.

R19 - May form explosive peroxides.

R22 - Harmful if swallowed.

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Ethyl Ether	60-29-7	F+; R12 R19	No information	S2 S9 S16 S9 S33

		Xn; R22 R66 R67		
Ethyl Alcohol 190 proof	64-17-5	F; R11	No information	S7 S16
Pyroxilin	9004-70-0	E; R3	No information	S2 S35

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

F - Highly flammable.

Xn - Harmful.

Xn



F



16. OTHER INFORMATION

Preparation Date: 6/17/2015
Revision Date: 4/18/2017
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet