



## SAFETY DATA SHEET

### Section 1: IDENTIFICATION

**Product Name:** Lacquer Thinner 2  
**Product Code:** B3850  
**MSDS Date:** November 7, 2014

Flo-Strip Division  
2101 Clifton Ave  
St. Louis, MO 63139

**General Information:** 314-644-1300  
**CHEMTREC:** 800-424-9300

### Section 2: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### GHS Classification:

Flammable liquids (Category 2)  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Specific target organ toxicity - single exposure (Category 3), Central nervous system  
Specific target organ toxicity - repeated exposure (Category 2)  
Reproductive toxicity (Category 2)  
Aspiration hazard (Category 1)

##### GHS Labeling



**Symbol:**

**Signal Word:** Danger

##### Hazard Statements:

Highly flammable liquid and vapor  
Suspected of damaging fertility or the unborn child  
Causes skin and serious eye irritation  
May cause damage to organs through prolonged or repeated exposure.  
May cause drowsiness or dizziness  
May be fatal if swallowed and enters airways.

##### Precautionary Statements:

###### **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep container tightly closed.  
Ground/Bond container and receiving equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe mist/vapor/spray.  
Wash hands thoroughly after handling.



Wear protective gloves/protective clothing/eye protection/face protection.  
Use only outdoors or in well-ventilated area.  
Do not handle until all safety precautions have been read and understood.  
Obtain special instructions before use.

**Response:**

IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash before reuse. Rinse skin with plenty of water/shower.

In case of fire: consider carbon dioxide, dry chemical powder, dry sand, limestone powder, or alcohol resistant foam to extinguish.

If exposed or if you feel unwell: Call a poison center / doctor.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

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 swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

Call a poison center if you feel unwell.

Get medical advice/attention if you feel unwell.

**Storage:**

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

Store locked up.

**Disposal:**

Dispose of contents/ container in accordance with local/regional/national regulations.

**Potential Health Effects:** See Section 11 for more information

This product does not contain carcinogens or potential carcinogens as listed by IARC, NTP, or ACGIH.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Potential Environmental Effects:** See Section 12 for more information.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Isopropyl Alcohol CAS #67-63-0	1-50	400 ppm	Not Avail	400 ppm	Not Avail
2	Light Hydrotreated Distillate CAS #68410-97-9	1-50	5 mg/m <sup>3</sup>	Not avail	5 mg/m <sup>3</sup>	Not avail
3	Toluene CAS #108-88-3	1-100	200 ppm	Not Avail	20 ppm	Not Avail
4	Ethyl Acetate CAS #141-78-6	1-50	400 ppm	Not Available	400 ppm	Not Available
5	Acetone CAS #67-64-1	1-50	1,000 ppm	Not Avail	500 ppm	Not Avail
6	Normal Butyl Acetate CAS #123-86-4	1-50	150 ppm	200 ppm	150 ppm	200 ppm



## Section 4: FIRST AID MEASURES

### Emergency first aid procedures by route of exposure:

- Inhalation:** If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- Skin:** Wash off for 20 minutes. Remove contaminated clothing, and any extraneous chemical.
- Eyes:** Immediately flush eyes with water for at least 20 minutes while holding eyelids open. Remove contact lenses. Get medical attention if irritation persists.

## Section 5: FIRE FIGHTING MEASURES

**Flash Point (toluene):** Closed cup: 4°C (39°F). (Tagliabue (ASTM D-56))

**Auto-ignition Temperature (toluene):** 536°C (997°F)

**Lower Explosion Limit (toluene):** AP 1.2 %

**Upper Explosion Limit (toluene):** AP 7.1 %

**Flammability Classification:** Flammable Liquid Class IB

### Suitable Extinguishing Media:

Use methods appropriate for the surrounding fire. Consider carbon dioxide, dry chemical powder, dry sand, limestone powder, or alcohol resistant foam.

**Products of Combustion:** Incomplete combustion may form carbon monoxide. Fire or intense heat may cause violent rupture of packages. Flash back possible over considerable distance. May form explosive mixtures in air. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes. In the event of fire, cool tanks with water spray.

### Fire Fighting Equipment/Instructions:

Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for fire-fighting if necessary

HAZARD	HMIS	NFPA
Toxicity	2	2
Fire	4	4
Reactivity	0	0

## Section 6: ACCIDENTAL RELEASE MEASURES

**Personal Protection:** For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

**Special Properties:** Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed

with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

**Environmental Precautions:** Prevent discharge to open bodies of water, municipal sewers, and watercourses.

**Method for Containment:** Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth. Control runoff and isolate discharged material for proper disposal. Approach release from upwind.

**Methods for Clean-up:** Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container.

## Section 7: HANDLING AND STORAGE

### Handling:

Keep away from heat, sparks and flame. Use only with adequate ventilation.

To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

### Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep away from oxidizers.

## Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protective Equipment (PPE)

**Respiratory Protection:** Wear appropriate respirator when ventilation is inadequate.

**Eye/Face Protection:** Splash proof chemical goggles and face shield.

**Hand Protection:** Neoprene gloves, impervious gloves, the breakthrough time of the selected glove(s) must be greater than the intended use period.

**Body:** Avoid skin contact. If product comes in contact with clothing, immediately remove soaked clothing and shower. Wear long sleeve shirts and trousers without cuffs.

### Other Protective Equipment:

Facilities storing or utilizing this material should be equipped with eyewash and safety shower facilities.

See section 3 for exposure limits.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance, State</b>	Clear liquid
<b>Color</b>	Colorless
<b>Odor</b>	Not available
<b>pH (1%soln/water)</b>	Not Available
<b>Vapor Density (toluene)</b>	>3 (Air=1)
<b>Boiling Range (toluene)</b>	80 to 145°C (176 to 293°F)
<b>Vapor Pressure (toluene)</b>	AP 3.2 kPa (AP 24 mm Hg) (at 20°C)

<b>Melting Point</b>	Not Available
<b>Freezing Point</b>	Not Available
<b>Flash Point</b> (See Section 5)	
<b>Flammability Properties</b> (See section 5)	
<b>Solubility</b> (in water)	Very Slightly Soluble
<b>Specific Gravity (toluene)</b>	0.87 (Water = 1)
<b>Evaporation Rate</b>	Not Available
<b>Octanol/Water partition coefficient (Kow)</b>	Not Available
<b>Auto-ignition temperature:</b>	Not Available
<b>Decomposition temperature:</b>	Not Available

## Section 10: STABILITY AND REACTIVITY

**Stability:** This material is considered stable at ambient temperatures 70°C (21°C).

**Condition to Avoid:** Flames, sparks, electrostatic discharge, heat and other ignition sources.

**Incompatible Materials:** This product reacts with reactive metals (eg. Sodium, calcium, zinc etc), materials reactive with hydroxyl compounds, and oxidizing agents.

**Hazardous Decomposition:** Upon decomposition, this product evolves carbon monoxide, carbon dioxide, aldehydes, and flammable hydrocarbon fragments (eg acetylene).

**Hazardous Reactions:** This product will not undergo polymerization.

## Section 11: TOXICOLOGICAL INFORMATION

### ACUTE EFFECTS:

#### Component Analysis LD50

Acetone (67-64-1)

Oral LD50 Rat: 5800 mg/kg

LC50 Inhalation - rat - 8 h - 50,100 mg/m<sup>3</sup>

LD50 Dermal - guinea pig - 7,426 mg/kg

Skin - rabbit - Mild skin irritation - 24 h

Eyes - rabbit - Eye irritation - 24 h

Toluene (108-88-3)

48 Hr EC50 Daphnia magna: 5.46 - 9.83 mg/L [Static];

48 Hr EC50 Daphnia magna: 11.5 mg/L

Inhalation LC50 Rat 12.5 mg/L 4 h;

Inhalation LC50 Rat >26700 ppm 1 h;

Oral LD50 Rat 636 mg/kg;

Dermal LD50 Rabbit 8390 mg/kg;

Dermal LD50 Rat 12124 mg/kg

Ethyl Acetate (141-78-6)

Oral LD50 Rat: 5620 mg/kg

Dermal LD50 Rabbit >20 gm/kg

Dermal LD50 Rabbit >18000 mg/kg

Inhalation mouse LC50=45 gm/m<sup>3</sup>/2H

Inhalation, rat LC50=200 gm/m<sup>3</sup>

Oral mouse LD50=4100 mg/kg

Oral rabbit LD50=4935 mg/kg

Oral rat LD50=5620 mg/kg

Isopropyl Alcohol (67-63-0)  
Inhalation LC50 Rat: 72.6 mg/L/4H  
Oral LD50 Rat: 4396 mg/kg  
Dermal LD50 Rat: 12800 mg/kg  
Dermal LD50 Rabbit: 12870 mg/kg

Normal Butyl Acetate (23-86-4)  
Inhalation, mouse: LC50 = 6gm/m<sup>3</sup>/2H  
Inhalation, rat: LC50 = 2000 ppm/4H  
Oral, mouse: LD50 = 7060 mg/kg  
Oral, rabbit LD50 = 3200 mg/kg  
Oral rat LD50 = 10768 mg/kg  
Skin rabbit LD50 = 17,600 mg/kg

#### CHRONIC EFFECTS:

##### Component

Acetone (67-64-1)

**Carcinogenicity:** ACGIH A4 – Not Classifiable as a Human Carcinogen

**Neurotoxicity:** This product contains Acetone, a central nervous system target.

**Mutagenicity:** No information available for product.

**Reproductive:** Prolonged skin contact may defat the skin and produce dermatitis in a study of pregnant rats and mice exposed to acetone vapor during 6-19 of gestation, slight developmental toxicity was observed. Reports of other reproductive effects of acetone include observations of testicular effects and changes of sperm quality in rats.

**Developmental:** No information available for product.

**Target Organs:** Acetone can target the respiratory system, eyes, CNS, kidneys, hematology. Narcosis; CNS depression; eye, nose throat, and skin irritation. Harmful if swallowed or inhaled. Can cause CNS depression, drowsiness, narcosis, or asphyxiation. **Skin Contact:** Repeated exposure may cause skin dryness or cracking in human volunteers, topical application of acetone for 30 to 90 minutes produced considerable skin damage with high degree restoration after 72 hours. **Eye contact:** Can cause severe eye irritation. **Inhalation:** Health effects reported in humans caused by inhalation include increase in visual reaction time and decrease in dual response task at 250 ppm; mucous membrane irritation, heavy eyes, headache, and general weakness accompanied by blood changes at 500 ppm; chronic inflammation of airways, stomach and duodenum at 1000 ppm; and severe toxic effects at 4000 ppm. Acetone is readily absorbed into blood stream. **Ingestion:** Symptoms of ingestion include nausea, vomiting, gastric hemorrhage, sedation, respiratory depression, ataxia, and paresthesia.

Light Hydrotreated Distillate (CAS #68410-97-9)

**Carcinogenic Effects:** Not Available

**Mutagenic Effects:** Not Available

**Teratogenic Effects:** Not Available

**Developmental Toxicity:** Not Available

**Target Organs: Routes of exposure** Inhalation. Ingestion. **Eyes** Avoid contact with eyes. Causes eye irritation. **Skin** Avoid contact with the skin. Contact with skin may cause irritation. **Inhalation** Prolonged inhalation may be harmful.

Toluene (108-88-3)

**Carcinogenic Effects:** A4 - Not classifiable for human or animal by ACGIH.

**Mutagenic Effects:** Not Available.

**Teratogenic Effects:** Not Available

**Developmental Toxicity:** Reproductive effects in experimental animals and in long term chemical abuse situations.

**Target Organs:** Long-term overexposure to toluene has been associated with impaired color vision. Also, long-term overexposure to toluene in occupational environments has been associated with hearing damage.

Skin, respiratory system, Central nervous system, Heart, blood, kidneys, lungs, liver, mucous membrane, brain, eyes, lens, or cornea.

Ethyl Acetate (141-78-6)

**Carcinogenicity:** ACGIH A4 – Not Classifiable as a Human Carcinogen

**Neurotoxicity:** This product contains ethyl acetate, a central nervous system target.

**Mutagenicity:** Cytogenetic analysis hamster fibroblast 9g/L Sex Chromosome Loss/Non-disjunction S Cerevisiae 24400ppm

**Reproductive:** No information available for product.

**Developmental:** No information available for product.

**Target Organs:** Ethyl acetate can target the respiratory system, skin, and eyes. **Eyes:** Causes eye irritation. Vapors may cause eye irritation. **Skin:** May cause skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis. **Ingestion** May cause irritation of the digestive tract. May cause liver and kidney damage. Ingestion of large amounts may cause central nervous depression. May cause headache, nausea, fatigue, and dizziness. **Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled. Inhalation of high concentrations may cause narcotic effects. **Chronic:** Chronic inhalation may cause effects similar to those of acute inhalation. Chronic exposure may product anemia, leukocytosis, cloudy swelling, and fatty degeneration of the viscera.

Isopropyl Alcohol (67-63-0)

**Carcinogenicity:** No known hazards

**Mutagenicity:** Not available.

**Reproductive:** Not available.

**Developmental:** Not available.

**Target Organs:** skin, eyes, CNS, and respiratory system. **Eye:** Contact with eyes may cause redness and pain. **Skin:** Contact with skin may cause dry skin. **Inhalation:** Inhalation of this material may cause: cough, dizziness, drowsiness, headache, sore throat, abdominal pain, labored breathing, nausea, vomiting, and unconsciousness. **Ingestion:** Ingestion of this material may cause: cough, dizziness, drowsiness, headache, sore throat, abdominal pain, labored breathing, nausea, vomiting, and unconsciousness.

Normal Butyl Acetate (123-86-4)

**Carcinogenic Effects:** not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

**Mutagenic Effects:** Not Available.

**Teratogenic Effects:** Not Available

**Developmental Toxicity:** Specific Developmental Abnormalities: Musculoskeletal, inhalation rat TCL=1500ppm/7H.

**Target Organs:** **Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness. **Skin:** May be harmful if absorbed through skin. Causes skin irritation. **Eyes:** Causes eye irritation. **Ingestion:** May be harmful if swallowed.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Acetone (67-64-1)

96 hour LC50 Oncorhynchus mykiss: 5540 mg/L (static)

96 hour LC50 Pimephales promelas 6210 mg/L [flow through]

96 hour LC50 Lepomis macrochirus: 8300 mg/L [static]

15 min EC50 Photobacterium phosphoreum: 14,500 mg/L

48 Hr EC50 water flea: 0.0039 mg/L

48 hour EC50 water flea: 12,700 mg/L [static]

48 hour EC50 Daphnia magna: 12,600 mg/L

**Ecotoxicity:** Toluene (108-88-3)

96 Hr EC50 Pseudokirchneriella subcapitata: >433 mg/L;

72 Hr EC50 Pseudokirchneriella subcapitata: 12.5 mg/L [static] mg/L [flow-through] (1 day old);



96 Hr LC50 Pimephales promelas: 12.6 mg/L [static];  
96 Hr LC50 Oncorhynchus mykiss: 5.89-7.81 mg/L [flowthrough];  
96 Hr LC50 Oncorhynchus mykiss: 14.1- 17.16 mg/L [static];  
96 Hr LC50 Oncorhynchus mykiss: 5.8 mg/L [semi-static];  
96 Hr LC50 Lepomis macrochirus: 11.0-15.0 mg/L [static];  
96 Hr LC50 Oryzias latipes: 54 mg/L [static];  
96 Hr LC50 Poecilia reticulata: 28.2 mg/L [semi-static];  
96 Hr LC50 Poecilia reticulata: 50.87-70.34 mg/L [static]  
48 Hr EC50 Daphnia magna: 5.46 - 9.83 mg/L [Static];  
48 Hr EC50 Daphnia magna: 11.5 mg/L

**Ecotoxicity:** Ethyl Acetate (141-78-6)

48 Hr EC50 Scenedesmus Subspicatus 3300 mg/L  
96 Hr LC50 Pimephales promelas: 230mg/L [flow-through]  
96 Hr LC50 Oncorhynchus mykiss: 484 mg/L [flow through]  
5 min EC50 Photobacterium phosphoreum: 1180 mg/L  
15 min EC50 Photobacterium phosphoreum: 5870 mg/L  
2 Hr EC50 Pseudomonas fluorescens: 7400 mg/L  
15 min EC50 Pseudomonas fluorescens: 1500 mg/L  
48 Hr EC50 Daphnia magna: 717 mg/L

**Ecotoxicity:** Isopropyl Alcohol (67-63-0)

96 Hr EC50 Scenedesmus Subspicatus: >1000 mg/L  
72 Hr EC50 Scenedesmus subspicatus:>1000 mg/L  
96 Hr LC50 Pimephales promelas: 9640 mg/L [flow through]  
96 Hr LC50 Pimephales promelas: 94900 mg/L [flow through] (29 days old)  
96 Hr LC50 Pimephales promelas: 61200 mg/L [flow through] (31 days old)  
5 min EC50 Photobacterium phosphoreum: 35390 mg/L  
48 Hr EC50 Daphnia magna: 13299 mg/L

**Ecotoxicity:** Normal Butyl Acetate (123-86-4)

96 Hr Fish Fathead Minnow LC50 = 18.0 mg/L  
96 Hr bluegill/Sunfish: LC50 = 100 mg/L  
48 Hr Static Condition water flea EC50 = 44.0 mg/L

### Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

### Section 14: TRANSPORT INFORMATION

**Proper Shipping Name:** Paint related material

**Hazard Class:** 3

**Identification No.:** UN1263

**Packing Group:** II

**Label:** Flammable

### Section 15: REGULATORY INFORMATION

**TSCA Inventory** This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.





**SARA 302/304** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

**SARA 313:** Toluene (CAS #108-88-3)

**CERCLA** The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Acetone [CAS No. 67-64-1] RQ = 5,000. Toluene [CAS No.: 108-88-3] RQ = 1000 lbs. (453.6 kg), Ethyl Acetate (5,000 lbs) Butyl Acetate (CAS No.: 123-86-4) RQ = 5,000 lbs

**SARA 311/312 Hazard** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard

#### Additional Regulatory

##### Remarks

Federal Hazardous Substances Act, related statutes, and Consumer Product Safety Commission regulations, as defined by 16 CFR 1500.14(b)(3) and 1500.83(a)(13): This product contains Toluene which may require special labeling if distributed in a manner intended or packaged in a form suitable for use in the household or by children. Precautionary label dialogue should display the following: **DANGER: Contains Toluene! Harmful or fatal if swallowed! Call Physician Immediately. Vapor Harmful! KEEP OUT OF REACH OF CHILDREN!**

## Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared by: Chemisphere Corp. on 4/1/14

#### Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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