

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/23/2014

Reviewed on 03/21/2014

1 Identification

- **Product identifier**
- **Trade name:** Lacquer Thinner 444
- **Article number:** 0444 JLM
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Jamson Laboratories, Inc.
101 South Bayview Blvd.
Oldsmar, FL 34677
USA
- **Information department:** Product Safety Department
- **Emergency telephone number:** ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT SE 2 H371-H336 May cause damage to organs. May cause drowsiness or dizziness.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

toluene

methanol

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- **Hazard statements**

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging fertility or the unborn child.

May cause damage to organs. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

- **Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store locked up.

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

- **Information pertaining to particular dangers for man and environment:**

This product contains Methanol which has toxic effects by ingestion, skin absorption and inhalation on internal organs and causes permanent blindness in humans and other primates. It cannot be made non-poisonous. Due caution is advised regarding handling resulting in long term or repeated exposures.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *2

Fire = 3

Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

108-88-3	toluene	50-100%
67-64-1	acetone	10-25%
67-56-1	methanol	2.5-10%
67-63-0	propan-2-ol	≤ 2.5%

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4 First-aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:**

Remove contact lenses if able to do so.

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Do not induce vomiting; immediately call for medical help.

Rinse out mouth and then drink plenty of water.

A person vomiting while lying on their back should be turned onto their side.

Immediately call a doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

Nausea

Coughing

Unconsciousness

Methaemoglobinaemia

Disorientation

Dizziness

Breathing difficulty

- **Danger**

Danger of pneumonia.

Danger of disturbed cardiac rhythm.

Causes Permanent Blindness

Danger of pulmonary edema.

- **Indication of any immediate medical attention and special treatment needed**

Administration of beverage alcohol, (Ethanol / EthylAlcohol) may be partially antidotal in cases of Methanol Poisoning, this treatment should be given only under medical supervision or on the advice of a doctor.

Medical supervision for at least 48 hours.

Later observation for pneumonia and pulmonary edema.

5 Fire-fighting measures

- **Extinguishing media**

· **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

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- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Flammable gas-air mixtures may be formed in empty receptacles.
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
Store away from oxidizing agents.
Store away from foodstuffs.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

108-88-3 toluene

PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm
TLV	Long-term value: 75 mg/m ³ , 20 ppm BEI

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67-64-1 acetone

PEL Long-term value: 2400 mg/m³, 1000 ppm
 REL Long-term value: 590 mg/m³, 250 ppm
 TLV Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm
 Long-term value: (1188) NIC-475 mg/m³, (500) NIC-200 ppm
 BEI

67-56-1 methanol

PEL Long-term value: 260 mg/m³, 200 ppm
 REL Short-term value: 325 mg/m³, 250 ppm
 Long-term value: 260 mg/m³, 200 ppm
 Skin
 TLV Short-term value: 328 mg/m³, 250 ppm
 Long-term value: 262 mg/m³, 200 ppm
 Skin; BEI

67-63-0 propan-2-ol

PEL Long-term value: 980 mg/m³, 400 ppm
 REL Short-term value: 1225 mg/m³, 500 ppm
 Long-term value: 980 mg/m³, 400 ppm
 TLV Short-term value: 984 mg/m³, 400 ppm
 Long-term value: 492 mg/m³, 200 ppm
 BEI

· Ingredients with biological limit values:**108-88-3 toluene**

BEI 0.02 mg/L
 Medium: blood
 Time: prior to last shift of workweek
 Parameter: Toluene

0.03 mg/L
 Medium: urine
 Time: end of shift
 Parameter: Toluene

0.3 mg/g creatinine
 Medium: urine
 Time: end of shift
 Parameter: o-Cresol with hydrolysis (background)

67-64-1 acetone

BEI 50 mg/L
 Medium: urine
 Time: end of shift
 Parameter: Acetone (nonspecific)

67-56-1 methanol

BEI 15 mg/L
 Medium: urine
 Time: end of shift
 Parameter: Methanol (background, nonspecific)

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67-63-0 propan-2-ol

BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Neoprene gloves

PVC or PE gloves

Nitrile rubber, NBR

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Not suitable are gloves made of the following materials:**

Natural rubber, NR

Leather gloves

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Solvent resistant protective clothing

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9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Clear
Odor:	Solvent-like
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55 °C (131 °F)

- **Flash point:** -19 °C (-2 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 455 °C (851 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower:	1.2 Vol %
Upper:	13.0 Vol %

- **Vapor pressure at 20 °C (68 °F):** 233 hPa (175 mm Hg)

- **Density at 20 °C (68 °F):** 0.802 g/cm³ (6.693 lbs/gal)

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

- Water: Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

- **Solvent content:**

Organic solvents:	100.0 %
VOC content:	87.0 %
	697.7 g/l / 5.82 lb/gl

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions**
Reacts with strong acids and oxidizing agents.
Flammable.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Hydrocarbons
Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

67-56-1 methanol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:**
Irritating effect.
No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)

108-88-3	toluene	3
67-63-0	propan-2-ol	3

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

14 Transport information

- | | |
|---------------------------------------|-------------------------------|
| · UN-Number | |
| · DOT, IMDG, IATA | UN1263 |
| · UN proper shipping name | |
| · DOT | <i>Paint related material</i> |
| · IMDG, IATA | <i>PAINT RELATED MATERIAL</i> |
| · Transport hazard class(es) | |
| · DOT | |
| | |
| · Class | <i>3 Flammable liquids.</i> |
| · Label | <i>3+6.1</i> |
| · IMDG, IATA | |
| | |
| · Class | <i>3 Flammable liquids.</i> |
| · Label | <i>3+6.1</i> |
| · Packing group | |
| · DOT, IMDG, IATA | <i>II</i> |
| · Environmental hazards: | |
| · Marine pollutant: | <i>No</i> |
| · Special precautions for user | |
| · Danger code (Kemler): | <i>336</i> |

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- | | |
|--|--|
| · EMS Number: | <i>F-E,S-D</i> |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | <i>Not applicable.</i> |
| · UN "Model Regulation": | <i>UN1263, Paint related material, 3 (6.1), II</i> |

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

<i>108-88-3</i>	<i>toluene</i>
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<i>67-56-1</i>	<i>methanol</i>
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<i>67-63-0</i>	<i>propan-2-ol</i>
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

<i>108-88-3</i>	<i>toluene</i>
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· **Chemicals known to cause reproductive toxicity for males.**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

<i>108-88-3</i>	<i>toluene</i>
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<i>67-56-1</i>	<i>methanol</i>
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

<i>108-88-3</i>	<i>toluene</i>	<i>II</i>
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<i>67-64-1</i>	<i>acetone</i>	<i>I</i>
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· **TLV (Threshold Limit Value established by ACGIH)**

<i>108-88-3</i>	<i>toluene</i>	<i>A4</i>
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<i>67-64-1</i>	<i>acetone</i>	<i>A4</i>
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<i>67-63-0</i>	<i>propan-2-ol</i>	<i>A4</i>
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is listed as a suspected carcinogen.

· **GHS label elements** *The product is classified and labeled according to the Globally Harmonized System (GHS).*

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- **Hazard pictograms**



- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

toluene

methanol

- **Hazard statements**

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging fertility or the unborn child.

May cause damage to organs. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

- **Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store locked up.

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

- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** *Environment protection department.*

- **Date of preparation / last revision** *5/23/2014 Revised section 14 "Transportation".*

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent