



WEBER SCIENTIFIC

Material Safety Data Sheet

Effective Date: Oct. 10, 2006

Supercedes: Aug 1, 2005

Weber Scientific
2732 Kuser Road
Hamilton, NJ 08691

Telephone for information: 609-584-7677
Emergency Telephone :Chem-Tel: 800-255-3924
Outside USA: 813-248-0585

Section 1. Product Identification

Product name: L-W Stain, Xylene Formula

General Use: scientific stain

Product description: blue/purple liquid, aromatic odor

Product code: 2001-00, 2001-20, 2002-00, 2002-20

Section 2. Composition/Information on Ingredients

<u>Hazardous components</u>	<u>CAS #</u>	<u>% by weight</u>	<u>OSHA PEL</u>	<u>ACGIH TWA</u>	<u>SARA Title III</u>
Denatured ethanol (CH ₃ CH ₂ CH)	64-17-5	40-70	1000 ppm	1000 ppm	
Xylene (Aromatic hydrocarbon) (C ₆ H ₄ (CH ₃) ₂) (a,c,d)	1330-20-7	30-50	100 ppm	100 ppm	yes
Glacial Acetic Acid (c) (CH ₃ COOH)	64-19-7	3-7	10 ppm	10 ppm	
Methyl Alcohol (a,b,c) (CH ₃ OH)	67-56-1	1-5	200 ppm	200 ppm	yes

(a,c) See Section 15

(b) Indicated that the Resource Conservation and Recovery Act (RCRA) has determined the waste for this chemical is listed as hazardous and must be handled according to regulations in 40 CFR 260-281.

(d) Indicates substance appears on, International Agency for Research on Cancer (IARC) Group 3 list if carcinogens..

Section 3. Hazards Identification

Emergency Overview:

DANGER ! MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN, AFFECTS LIVER, KIDNEYS, CENTRAL NERVOUS SYSTEM AND GASTROINTESTINAL

**TRACT, CAUSES SEVERE IRRITATION TO EYES, SKIN AND RESPIRATORY TRACT.
FLAMMABLE, HAZARD SYMBOLS: F**

Persons with pre-existing skin, eye or central nervous system disorders or impaired liver, kidney or pulmonary function may be more susceptible to the effects of this substance.

Potential Health Effects:

INHALATION: High concentrations are irritating to the mucus membranes of the upper respiratory tract, may cause headache, ringing in the ears, dizziness, nausea, vomiting and severe breathing difficulties.

High vapor concentrations are anesthetic and central nervous system depressants.

SKIN: Brief contact may cause slight irritation, loss of natural oils, prolonged contact may cause moderate irritation or dermatitis. This problem may be accentuated by liquid becoming trapped against the skin by contaminated clothing or shoes.

EYES: High vapor concentration or contact may cause irritation, discomfort or pain. May cause slight transient corneal injury. Splashes may cause severe irritation. Possible corneal burns and eye damage.

INGESTION: Swallowing of this material may result in irritation of the mouth and GI tract. Vomiting and subsequent aspiration into the lungs may lead to a severe hemorrhagic pneumonitis with severe pulmonary injury or death..

CARCINOGENICITY: Xylene is listed in Group 3 by IARC (monograph), "Not classifiable as carcinogenic in humans", listed by ACGIH, Appendix 4 as "Not Classifiable as a human carcinogen".
OSHA PEL and NIOSH REL: 100 ppm, 435 mg/m³.

Section 4- First Aid Measures

INHALATION: Remove affected person to fresh air, provide oxygen if breathing is difficult, if affected person is not breathing administer CPR, do not use mouth-to-mouth resuscitation, seek emergency medical attention.

SKIN: Remove contaminated clothing, wash affected area with soap and water, launder contaminated clothing before reuse, if irritation persists seek medical attention.

EYES: Remove contact lenses, flush eyes with clear running water for 15 minutes while holding eyelids open, if irritation persists seek immediate medical attention.

INGESTION: Aspiration hazard, DO NOT induce vomiting. If vomiting occurs keep head below hips to prevent aspiration into lungs. Take affected person immediately to a hospital, do not give anything by mouth to an unconscious person.

Section 5- Fire Fighting Measures

FLASH POINT (METHOD USED): 84°F (Closed Cup)

FLAMMABLE LIMITS: LEL 1.0 %; UEL 7.0%

AUTOIGNITION TEMPERATURE: Xylene: 464°C NFPA Class: IC

EXTINGUISHING MEDIA: Carbon dioxide, water, water fog, dry chemical, chemical foam. Water in straight hose stream should be avoided as it can scatter and spread existing burning liquid.

FIRE FIGHTING PROCEDURES: Self-contained respiratory equipment, cool containers to prevent build-up and possible explosion when exposed to extreme heat. CAUTION- MATERIAL IS FLAMMABLE !

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers can explode due to build-up of pressure when exposed to extreme heat. Sensitive to static discharge.

HAZARDOUS COMBUSTION PRODUCTS: Irritating or toxic substances such as carbon oxides may be emitted upon thermal decomposition.

Section 6- Environmental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition and use non-sparking tools and equipment. Evacuate and ventilate area, confine and absorb into

inert absorbent (vermiculite, dry sand, earth, DO NOT use combustible materials like sawdust); do not flush to sewer, place material into approved containers for disposal; for spills in excess of allowable limits (RQ) notify the National Response Center (800-424-8802); refer to CERCLA 40 CFR 302 and SARA Title III, Section 313, 40 CFR 372 for detailed instructions concerning reporting requirements. DO NOT enter low-lying areas without self-contained breathing apparatus where vapors may be present. Inhalation could be fatal.

Section 7- Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse, extreme temperatures and separate from incompatibles. **CAUTION FLAMMABLE-** keep away from all sources of ignition. "Empty" containers may contain residue which may form explosive vapors. Do not weld or cut near empty container that has not been professionally reconditioned. Use non-sparking tools when opening and closing containers. Maintain well ventilated work areas to minimize exposure when handling this material. Avoid inhaling concentrated fumes or vapors.

Section 8- Exposure Controls/Personal Protection

ENGINEERING CONTROLS:

The use of local exhaust ventilation is recommended to control emissions near the source and keep employee exposures below the Airborne Exposure Limits. Provide Self-contained Breathing Apparatus for workers entering confined spaces. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment. See Section 2 for component exposure guidelines.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION: None required while threshold limits (Section 2) are kept below maximum allowable concentrations: if TWA exceeds limits NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations. DO NOT enter low-lying areas without self-contained breathing apparatus.

PROTECTIVE GLOVES: neoprene or rubber gloves with cuffs to prevent skin contact

EYE PROTECTION: Safety goggles with side shields or full face shield where splashing is possible.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Chemical impervious apron, safety eyewash nearby.

WORK/ HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this as well as all chemicals in general.

Section 9- Physical and Chemical Properties

BOILING POINT: 173 °F

VAPOR DENSITY: (air = 1): 3.78

VISCOSITY: similar to water

FREEZING POINT: not determined

VOLATILE ORGANIC COMPOUNDS (total VOCs): 8.97 lbs/gal

VAPOR PRESSURE @ 68°F: 8 mm Hg

SOLUBILITY IN WATER: complete

EVAPORATION RATE (n-butyl acetate =1): 0.7

PHYSICAL STATE: liquid

Section 10- Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID: extreme temps, open flames, sparks

INCOMPATIBILITY (materials to avoid): strong oxidizers and strong acids.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly, in case of fire oxides of carbon, hydrocarbons, fumes and toxic smoke may be produced.

HAZARDOUS POLYMERIZATION: will not occur

Section 11- Toxicological Information

<u>Hazardous components</u>	<u>CAS #</u>	<u>% by weight</u>	<u>LD₅₀ species</u>	<u>LCD₅₀ species</u>
Denatured ethanol (CH ₃ CH ₂ CH)	64-17-5	40-70	3450 mg/kg oral-mouse	20,000 ppm/10 hr inhalation-rat
Xylene (Aromatic hydrocarbon) (C ₆ H ₄ (CH ₃) ₂)	1330-20-7	30-50	4300 mg/kg oral-rat	5000 mg/m ³ / 4 hr inhalation-rat
Glacial Acetic Acid (CH ₃ COOH)	64-19-7	3-7	3310 mg/kg oral-rat	5620 ppm/1 hr inhalation-mouse
Methyl Alcohol (CH ₃ OH)	67-56-1	1-5	9100 mg/kg oral-rat	145,000 ppm/ 4 hr inhalation-rat

Section 12- Ecological Information

No data are available on the adverse effects of this material on the environment. Neither COD or BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. Xylene, an ingredient in this mixture, may be toxic to aquatic life: the LCD /96 hr values for fish are between 1 and 20 mg/L

Section 13- Disposal Considerations

WASTE DISPOSAL METHOD: Dispose of in accordance to Local, State and Federal Regulations. This product may produce concentrated hazardous vapors or fumes in a disposal container creating a dangerous environment. Refer to "40 CFR Protection of the Environment Parts 260-299" for complete waste disposal regulations for ignitable materials. Consult your local, state or federal Environmental Protection Agency before disposing of any chemicals. DO NOT flush to sanitary sewer or waterway.

Section 14- Transport Information

PROPER SHIPPING NAME: Ethanol solution

HAZARD CLASS / pack group: 3 / II

IDENTIFICATION NUMBER: UN 1170

IATA HAZARD CLASS/ pack group: 3 / II

IMDG HAZARD CLASS: 3 / II

Canadian TDG Class/Division: 3,2

HAZARD SYMBOLS: F.

REFERENCE: 49 CFR 173.202, 243

LABEL: FLAMMABLE LIQUID

Note: Transportation information provided is for reference only. User is urged to consult CFR 49 parts 100-177 IMDG, IATA, EC, Canadian TDG and United Nations TDG information manuals for detailed regulations and exceptions covering specific sizes, packaging materials and methods of shipping.

Section 15- Regulatory Information

TSCA (Toxic Substance Control Act)

Components of this product are listed on the TSCA Inventory

SARA Title III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories : Acute health, flammable, skin irritant, eye irritant

313 Reportable Ingredients:

A “yes” in the SARA Title III column in Section 2 indicates a toxic chemical subject to annual reporting of Section 313 of the Emergency Planning and Community Right-To-Know of 1986 and of 40 CFR 372.

CERCLA (Comprehensive Response Compensation and Liability Act)

The CERCLA has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture = 200 lbs) or greater amounts according to 40 CFR 302

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

IDL (Canadian Ingredient Disclosure List)

Components of this product listed on the Canadian Ingredient Disclosure List are shown in Section 2.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product are on the European Inventory of Existing Commercial Chemical Substances

WARNING: This product contains chemical(s) known in the State of California to cause cancer and reproductive harm in the female and male.

EC Risk Phrases

- R10/11 flammable
- R20/21 harmful by inhalation/skin contact
- R39/23/24/25 toxic danger of serious irreversible effect through inhalation, in contact with skin and if swallowed.
- R35 cause severe burns
- R38 irritating to skin

EC Safety Phrases

- S1/2 Keep locked up and out of the reach of children
- S7 Keep container tightly closed
- S16 Keep away from sources of ignition
- S23 do not breathe gas/fumes/vapor/spray
- S25 avoid contact with eyes
- S36/37 wear suitable protective clothing and gloves
- S45 in case of accident or if you feel unwell Seek medical advice immediately (show the Label whenever possible)

Section 16- Other Information

No Specific notes

HMIS HAZARD RATINGS

health: high
Flammability: moderate
Reactivity: insignificant

PERSONAL PROTECTIVE EQUIPMENT: H: splash goggles, gloves, apron, vapor respirator

REVISION SUMMARY: document contains revisions to msds issued 8/1/05

MSDS prepared by: John R Beck, PhD
Technical Service and Quality Control Manager
Weber Scientific

The information contained herein is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that the information is current, applicable, and suited to the circumstances of use. Weber Scientific assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Weber Scientific assumes no responsibility for injury caused by abnormal use of this product even if reasonable safety procedures are followed.