1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: HANSEL® Stain

Synonyms: 95% Methanol, Methyl Alcohol; Carbinol; Methol hydroxide; Methyl hydrate; Methyl hydroxide; Methylol; Wood alcohol

Other means of identification: CAS No. 67-56-1
EINECS No. 200-659-6

Supplier Details: Lide Laboratories Inc. 401 4th AVE SW New Prague, MN 56071
Emergency Contact: Lide Labs 952-758-9760 or contact a local medical center

2. HAZARDS IDENTIFICATION (as methanol)

OSHA Hazards: Flammable liquid, Irritant, Target organ effect, Toxic by ingestion, Toxic by skin absorption

Target Organs: Central nervous system, Eyes, Kidney, Liver

NFPA

GHS label elements, including precautionary statements

Signal Word: DANGER!

Hazard statement(s)
H225 Highly flammable liquid and vapor.
H301 + H311 Toxic if swallowed or in contact with skin.
H315 Causes skin irritation.
H331 Toxic if inhaled

Precautionary statement(s)
P263 Avoid contact during pregnancy/while nursing.
P501 Dispose of contents and container to an approved waste disposal plant.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P270 Do not eat, drink or smoke when using this product.
P240 Ground/bond container and receiving equipment.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or a doctor/ physician.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P233 Keep container tightly closed.
P322 Specific measures (see first aid measures on this label)
P321 Specific treatment (see supplemental first aid instructions on this label).
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P243 Take precautionary measures against static discharge.
P241 Use explosion-proof electrical, ventilating, and lighting equipment.
P242 Use only non-sparking tools.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves and eye and face protection.

GHS Classification(s)
Acute Toxicity, Dermal (Category 3)
Acute Toxicity, Inhalation (Category 3)
Acute Toxicity, Oral (Category 3)
Flammable Liquids (Category 2)
Specific target organ toxicity - single exposure (Category 1)
Specific target organ toxicity - single exposure (Category 2)
Other hazards which do not result in classification:

Potential Health Effects:
Organ Description
Eyes Causes eye irritation.
Ingestion Toxic if swallowed.
Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Skin Toxic if absorbed through skin. Causes skin irritation.

3. COMPOSITION AND INFORMATION ON INGREDIENTS
Chemical identity: 95% Methyl Alcohol
Common name / Synonym: Methanol; Carbinol; Methol hydroxide; Methyl hydrate; Methyl hydroxide; Methylol; Wood alcohol
CAS number: 67-56-1
EINECS number: 200-659-6
ICSC number: 0057
RTECS #: PC1400000
UN #: 1230
EC #: 603-001-00-X
% Weight Material CAS
95% Methyl Alcohol 67-56-1
5%: Methylene Blue CAS 61-73-4, Eosin Y (Acid Red 87) CAS 17372-87-1, Glycerin (Glycerol) CAS 56-81-5, Purified Water

4. FIRST AID MEASURES
General advice
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin
Wash skin with soap and copious amounts of water. HANSEL Stain will stain skin. Get medical attention if irritation persists after washing. Lava Soap has been found to be a good cleansing agent.

Inhalation
Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention. HANSEL Stain will stain eyes.

Ingestion
DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give and anything my mouth to an unconscious individual.
5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):
Carbon oxides expected to be the primary hazardous combustion product.

Special protective equipment and precautions for firefighters:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

Flammable Properties
Mixtures of water and as little as 21% methanol are flammable. This includes the product HANSEL Stain.

Classification
OSHA/NFPA Class IB Flammable Liquid.

Flash point
11 °C (52 °F) - Closed Cup

Auto ignition temperature
464 °C (867 °F)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear respiratory protection. Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions:
Stop leak / contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:
Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

7. HANDLING AND STORAGE

Precautions for safe handling:
Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage, including any incompatibilities:
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

<table>
<thead>
<tr>
<th>Component Source</th>
<th>Type</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol US (ACGIH)</td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>Methyl Alcohol US (OSHA)</td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>Methyl Alcohol US (ACGIH)</td>
<td>STEL</td>
<td>250 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Follow good laboratory practices and product use instructions when using HANSEL Stain.

Individual protection measures, such as personal protective equipment:

Respiratory protection:
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection:  
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  

Eye protection:  
Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.  

Skin and body protection:  
Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.  

Hygiene measures:  
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.  

9. PHYSICAL AND CHEMICAL PROPERTIES  
Appearance (physical state, color, etc.) Liquid, blue in color as HANSEL Stain with slight alcoholic odor.  
Freezing point -98 °C (-144 °F)  
Initial boiling point and boiling range 64 °C (147 °F)  
Flash point 11 °C (52 °F) - Closed Cup  
Upper / Lower flammability or explosive limits 6.0% (V) / 36.0% (V)  
Vapor pressure 130.3 hPa (97.7 mmHg) at 20 °C (68 °F)  
Vapor Density 1.1  
Relative Density 0.791 g/mL at 25 °C (77 °F)  
Solubility(ies) completely miscible  
Auto-ignition temperature 464 °C (867 °F)  
Formula (METHYL ALCOHOL) CH4O  
Molecular Weight (METHYL ALCOHOL) 32.04 g/mol  

10. STABILITY AND REACTIVITY  
Chemical Stability Stable under recommended storage conditions.  
HANSEL Stain has a two expiration date as of the date of manufacture.  
Possibility of hazardous reactions Vapors may form explosive mixture with air.  
Conditions to avoid (e.g., static discharge, shock or vibration) Heat, flames and sparks. Extreme temperatures and direct sunlight.  
Incompatible materials Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids  
Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides  

11. TOXICOLOGICAL INFORMATION  
Based on Methyl Alcohol 67-56-1  
Product Summary: No data available for the mutagenic, teratogenic, or reproductive effects of the product.  
Acute Toxicity:  
LC50 (Inhl) Rat 64,000 mg/Kg BWT 4 hours  
LD50 (Oral) Rat 5,628 mg/Kg BWT  
LD50 (Skin) Rabbit 15,800 mg/Kg BWT  
Irritation:  
Eyes (METHANOL) Direct contact with the eyes produces a mild, reversible irritation, assuming treatment is initiated promptly. Methanol ingestion or inhalation can lead to visual disturbance that can proceed to blindness.
Skin
Standard Draize skin test (rabbit) - Dose: 20 mg/24 hrs Reaction: Moderate Repeated exposure may cause skin dryness or cracking.

Carcinogenicity
IARC: Not classifiable as a human carcinogen.
ACGIH: Not classifiable as a human carcinogen.
NTP: Not classifiable as a human carcinogen.
OSHA: Not classifiable as a human carcinogen.

Other Hazards
Organ Description
Eyes Irritating to the eyes.
Ingestion Poison, may be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation Toxic by inhalation. Vapor harmful. May be irritating to the respiratory tract.
Skin Toxic in contact with skin. Irritating to skin.
Chronic
Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse liver effects. May cause adverse kidney effects. Methanol is slowly eliminated from the body, therefore it can have cumulative toxicity effects with repeated exposures.

12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available):
Acute Fish Toxicity (METHANOL)
LC50 / 96 hours Lepomis macrocirus: 15,400 mg/L / LC50 / 96 hours Fathead minnow: 29,400 mg/L
Toxicity to Aquatic Plants (METHANOL)
EC50 / 96 hours Scenedesmus capricornutum: 22,000 mg/L
Persistence and degradability:
This material is expected to be readily biodegradable. There is evidence that it is degraded under anaerobic conditions.
Bioaccumulative potential:
Bioconcentration factor (BCF) of 0.2. This material is not expected to bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:
Vapors may collect in empty containers. Treat empty containers as hazardous. Dispose of spill-clean up and other wastes in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:
UN number UN1230
UN proper shipping name Methanol Solution
Transport hazard class: 3
Packing group: II
HANSEL Stain is shipped as a limited quantity as defined by US DOT.
IMDG UN-Number: UN1230 Class: 3 (6.1) Packing Group: II
EMS-No: F-E, S-D
Proper shipping name: METHANOL Solution
Marine pollutant: No
IATA UN-Number: UN1230 Class: 3 (6.1) Packing Group: II
Proper shipping name: Methanol
15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:
OSH A Hazards
Flammable liquid, Irritant, Target organ effect, Toxic by ingestion, Toxic by skin absorption
All ingredients are on the following inventories or are exempted from listing

Country Notification
Australia AICS
Canada DSL
China IECS
European Union EINECS
Japan ENCS/ISHL
Korea ECL
New Zealand NZIoC
Philippines PICCS
United States of America TSCA

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA title III, Section 313:
METHANOL (CAS# 67-56-1) Revision date 2007-07-01.

SARA 311/312 Hazards
Acute Health Hazard
Chronic Health Hazard
Fire Hazard

CERCLA
No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

Massachusetts Right To Know Components
Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Pennsylvania Right To Know Components
Methanol CAS-No.67-56-1 Revision Date 2007-07-01

New Jersey Right To Know Components
Methanol CAS-No.67-56-1 Revision Date 2007-07-01

California Prop 65 Components
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. METHANOL CAS-No. 67-56-1 Revision Date 2012-03-16

16. OTHER INFORMATION:
INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Disclaimer
Lide Laboratories believes that the information on this SDS was obtained from reliable sources including our supplier(s) of methanol such as PHARMCO-AAPER. Most of the information is based on the safety data of methanol which is the primary (95%) component of HANSEL Stain. The information is believed to be correct to the best of our knowledge at the date of the SDS. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, Lide Laboratories does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product