

Hanco Ink, LLC

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MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION – CS-460

Review Date: 2-1-2013
Print Date: 2-1-2013

| NAPIM/HMIS Rating | |
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| Health | 1 |
| Flammability | 1 |
| Reactivity | 0 |
| Personal Protection | SC |

0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Extreme
SC - Glasses, gloves, apron

II. COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL NAME | % | CAS # | PEL | TLV |
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Proprietary

III. HAZARDS IDENTIFICATION

Routes of Entry: Ingestion, Skin contact, Eye contact, Inhalation.

Medical Conditions Aggravated: Eye disease, Skin disease including eczema and sensitization, Respiratory disease including asthma and bronchitis.

Immediate (Acute) Health Effects:

Inhalation: Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. Harmful! Can cause systemic damage (see "Target Organs")

Skin Contact: Can cause minor skin irritation, defatting, and dermatitis.

Eye Contact: Can cause minor irritation, tearing and reddening.

Skin Absorption: Minimal hazard in normal industrial use.

Ingestion: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Small amounts of this product aspired (breathing in of liquid into the lungs) into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

Target Organ Acute Toxicity: Eyes, Skin, Respiratory system, Central nervous system stimulation.

Long-Term (Chronic) Health Effects:

Carcinogenicity: No data available to indicate product or any component present at greater than 0.1% are suspected or listed carcinogens. Not listed as a carcinogen by: NTP, IARC, OSHA

Reproductive and Developmental Toxicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Inhalation: Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. Prolonged or excessive inhalation may cause respiratory tract irritation.

Skin Contact: Upon prolonged or repeated contact, can cause minor skin irritation, defatting, and dermatitis.

Eye Contact: Upon prolonged or repeated contact, can cause minor irritation, tearing and reddening.

Skin Absorption: Upon prolonged or repeated exposure, minimal hazard in normal industrial use. No component(s) in this product are known to be absorbed through the skin.

Target Organ Chronic Toxicity: Skin, Respiratory tract, Central nervous system stimulation.

Supplemental Health Hazard Information: Individuals with pre-existing eye and skin disorders can be at greater risk.

IV. FIRST AID

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. Seek medical advice if symptoms persist

Eyes: Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after flushing.

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| Skin Contact: | Wash with soap and water. Get medical attention if irritation develops or persists. |
| Ingestion: | Do not induce vomiting and seek medical attention immediately. Provide medical care provider with this MSDS. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal. |
| Notes to Medical Personnel: | Aspiration during swallowing or vomiting may severely damage the lungs. If evacuation of stomach contents is necessary, use method least likely to cause aspiration. Pre-existing allergies or eczema |

V. FIRE FIGHTING MEASURES

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| <u>Flammability Summary:</u> | Combustible |
| Flash Point: | 93 °C 200 °F |
| Fire Hazards: | Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire. Can burn in fire, releasing toxic vapors. Container may explode in heat of fire. |
| Extinguishing Media: | Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid. |
| Fire Fighting Instructions: | Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use water spray/fog for cooling. Run-off from fire control may cause pollution. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Frothing can occur if a water stream is used. Notify appropriate authorities if liquid enters sewers or other public waters. Heat may build pressure and rupture closed containers, spreading fire and increasing risk of burns or injuries. Water may be ineffective in fire fighting due to low flash point, low solvent density, and limited miscibility with water. |
| Hazardous Combustion Products: | Carbon monoxide, Carbon dioxide, Nitrogen containing gases, Hydrogen chloride, Smoke, Toxic fumes. |
| OSHA Flammability Class: | Combustible Liquid - Class III B |
| DOT Flammability Class: | Not Regulated |

VI. ACCIDENTAL RELEASE MEASURES

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| Health Consideration for Spill Response: | No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Ventilate the contaminated area. Poses little or no immediate hazard Remove soiled clothing and laundry before reuse. |
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Spill Mitigation Procedures:

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| General Methods: | Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. |
| Air Release: | Ventilate the area by opening door and/or turning on fans and blowers. |
| Water Release: | Avoid runoff into storm sewers and ditches that lead to waterways. Do not flush to sewer. Notify authorities if entry occurs. Retain all contaminated water for treatment. |
| Land Spills: | Avoid runoff into storm sewers and ditches that lead to waterways. Scoop up material and place in a disposal container. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Do not flush to sewer. |

VII. HANDLING AND STORAGE

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| Handling: | Mildly irritating material. Avoid unnecessary exposure. |
| Storage: | Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container closed when not in use. Keep away from sources of ignition. Store in a tightly closed container. Keep away from heat, sparks, and flame. Do not store in direct sunlight. Store in a cool dry place. |

VIII. ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

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| Engineering Controls: | Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. Good general room ventilation should be sufficient to control airborne contaminants to safe levels. |
| <u>Protective Equipment:</u> | |
| Respirator Type(s): | None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. |
| Eyes: | Wear safety glasses when handling this product. Wear chemical splash goggles if splashing or high-pressure system is used. |
| Skin: | Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Use of protective coveralls and long sleeves is recommended. Laundry contaminated clothing before reuse. Have a safety shower available. Contaminated clothing should be decontaminated then washed at a commercial laundry before re-use. |
| Glove Type: | Impervious rubber, Natural latex. |

IX. PHYSICAL DATA

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| Physical State: | Colored | | |
| Odor: | Mild Resinous | | |
| Vapor Density: | Heavier than air. Vapors that evolve from this product will tend to settle and accumulate near the floor. | | |
| Evaporation Rate: | Slower than Butyl acetate | | |
| Organic Volatiles, % by weight: | 10.73 | | |
| Specific Gravity: | 1.02 | | |
| Boiling Point: | 149 °C | Boiling Point: | 300 °F |

X. STABILITY AND REACTIVITY

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| Stability Information: | Stable: substances will remain stable when exposed to heat, pressure or water. Hazardous polymerization will not occur. |
| Conditions to Avoid: | Temperatures above flash point in combination with sparks, open flames, or other sources of ignition. |
| Chemical Incompatibility: | Strong oxidizing agents. |
| Hazardous Decomposition Products: | Hydrogen chloride, Nitrogen containing gases, Carbon dioxide, Carbon monoxide, Smoke, Toxic fumes. |

XI. TOXICOLOGICAL INFORMATION

No data available.

For toxicological information on the individual components, please call.

XII. ECOLOGICAL INFORMATION

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| Overview (for ingredients): | This material is not expected to be harmful to the ecology. No ecological information available. Keep out of waterways. |
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XIII. DISPOSAL CONSIDERATIONS

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| Disposal Methods: | Dispose in accordance with Federal, State, Provincial, and Local regulations. Materials may be compatible with industrial waste incineration or inclusion in a fuel blending program. This characterization is subject to approval by your waste management contractor. This material should be recycled if possible. |
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XIV. TRANSPORTATION INFORMATION

Packaging and shipping of this material should be done in accordance with DOT and other applicable Federal and International Regulations.

XV. REGULATORY INFORMATION

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| CONEG Legislation: | No CONEG metals are present above regulated limits |
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| U.S Toxic Substance Control Act: | All components of this product are either listed on the U.S. Toxic Substances Control Act (TSCA) inventory of chemicals or are otherwise compliant with TSCA regulations. |
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XVI. ADDITIONAL INFORMATION The information in this Material Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, and management and for persons working with or handling this product. The information presented in the MSDS is premised upon proper handling and anticipated uses and is for the material without chemical additions/alterations. We believe this information is up-to-date as of the date of publication and provide it in good faith, but make no warranty of any kind with respect to such information on this product.

Hanco Ink warrants only that its products consist of its published specifications. Hanco Ink does not make any (other) warranty, expressed or implied, including warranty of merchantability or warranty of fitness for a particular purpose and does not assume any liability resulting from the use of its products. Users should make their own investigation to determine the suitability of the information and the products for their particular purpose. We cannot guarantee results on all types of presses, stocks, etc., and we assume no liability in connection with the use of these products. In no event shall Hanco Ink, LLC be liable for any claims, losses, or damages of any third party or for any special, indirect, consequential, exemplary or punitive damages (including without limitation economic loss or loss of profits) of any kind of nature for any reason.