Material Safety Data Sheet

IMPORTANT NOTICE: This Material Safety Data Sheet (MSDS) is issued by LA-CO Industries, Inc. (LA-CO) in accordance with the U.S. OSHA Hazard Communication Standard, Canadian WHMIS Controlled Products Regulations, British CHIP regulation 6, Australian NMRCWHS and ANSI Z400.1-1993 guidelines. The information contained herein must not be altered, deleted or added to, with the exception of adding supplier/importer information in the space provided. LA-CO has no objection to its MSDS being copied if: a) the copy is made for safety-related purposes; and b) no alterations or amendments are made to the text or format of the MSDS, with the exception of adding supplier/importer information in the space provided. LA-CO does not guaranty the accuracy of any MSDS for our products which: a) is not prepared by LA-CO; b) is not authorized by LA-CO; c) is not in the format originally supplied by LA-CO; or d) has otherwise been amended or altered by a third party, with the exception of adding supplier/importer information in the space provided. Official LA-CO MSDS's reside on its web site at www.laco.com.

This document consists of two MSDS's

- **H Paintstik – White, Red, Blue, & Brown**
- **H Paintstik – Black, Green, & Yellow**

Section 1 Product and Company Identification

Product Name: **H Paintstik – White, Red, Blue & Brown**
Revision #: 2.2 **Date Prepared:** January 1, 1997 **Date Revised:** February 5, 2010

Manufacturer:

LA-CO INDUSTRIES, Inc./*Markal* Co.
1201 Pratt Blvd.
Elk Grove Village, IL, USA 60007-5746
Information Telephone: 847-956-7600
Emergency Telephone: Call CHEMTREC
USA 800-424-9300
International (Call Collect) 1-703-527-3887
Chemical Formula: Mixture
CAS No.: Not Applicable. **Derivation:** Not Applicable.
Synonyms: Not Applicable.
General Use: Marking crayon for hot metal surfaces.

Supplier/Importer:

Section 2 Composition/Information on Ingredients

Ingredient	CAS No.	%
Sebacic Acid	111-20-6	30

(For Section 2 footnotes: See Section 15)

Section 3 Hazards Identification

EMERGENCY OVERVIEW: FUMES MAY CAUSE IRRITATION.
KEEP OUT OF REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY.

POTENTIAL HEALTH EFFECTS
Primary Exposure Routes: Eyes, Inhalation
Acute Effects

Eyes: Fumes may cause irritation.
Skin: None expected.
Ingestion: None expected.
Inhalation: Inhalation of fumes may cause irritation of the nose and throat.

Chronic Effects
Eyes: None known
Skin: None known
Ingestion: None known
Inhalation: None known
Carcinogenicity: Not Applicable.
Target Organ Effects: Not Applicable.
Medical Conditions Aggravated by Long-Term Exposure: Not Determined.
Other Information: Not Applicable.

Section 4 First Aid

Eye Contact: Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Remove any contact lenses. Have victim roll eyes for more thorough flushing. Get medical attention if irritation persists.
Skin Contact: Flush skin with water or wash with soap and water. Consult physician if irritation develops.
Ingestion: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. Give victim water to dilute.
Inhalation: Remove victim to fresh air. Give oxygen if breathing is difficult. Give artificial respiration if breathing has stopped. Get medical attention.
Other Information: None known

Section 5 Fire Fighting Measures

Flash Point (method): 304^0F/151^0C (cc) **Autoignition Temperature:** 1058^0F/570^0C
LEL: Not Determined. **UEL:** Not Determined.
Flammability Classification: Not Determined.
Extinguishing Media: Water fog, foam, carbon dioxide, dry chemical.
Hazardous Combustion Products: Carbon monoxide and possibly other toxic fumes.
Unusual Fire or Explosion Hazards: None known.
Fire-Fighting Instructions/Equipment: Keep personnel removed and upwind of any fire. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Section 6 Accidental Release Measures

Use recommended personal protective equipment (see Section 8).
Small Spill: Sweep or scrape up. **Large Spill:** Sweep or scrape up.

Section 7 Handling and Storage

Handling Precautions: Use recommended personal protective equipment (see Section 8). Wash thoroughly after handling.
Storage Requirements: Store away from incompatible chemicals (see Sec. 10). Store in a cool, dry area.

Section 8 Exposure Controls/Personal Protection

Eye/Face Protection: Safety glasses. Where contact with the eyes is likely, use chemical goggles. Use a face shield as needed.
Skin/Hand Protection: Suitable for related activities where this product is used.
Respiratory Protection: Use a NIOSH/MSHA approved air-purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and

limitations. Use a positive pressure air supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respiratory protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Other Equipment: Eyewash and safety shower.

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control sources of dust or fumes.

Administrative Controls: Users of this product must be properly trained and qualified in its use.

Other Information: No food or beverage should be consumed in the work area. Wash thoroughly before eating, drinking, or smoking.

Section 9 Physical and Chemical Properties

Appearance/Physical State: Solid cylindrical crayon.
Odor: Not Applicable.
Odor Threshold (ppm): Not Determined.
Specific Gravity (H_2O = 1): >1
pH: Not Applicable.
Melting Point: Approximately 150^0F/66^0C
Boiling Point: Not Determined.
Vapor Pressure (mm Hg at 20^0C): Not Applicable.
Vapor Density (Air = 1): Not Applicable.
Evaporation Rate (n-BuAc=1): Not Applicable.
V.O.C.: 0%(w/w), 0%(v/v), 0 lbs./gal.(U.S.), 0 kg/l
Flash Point (method): (see Section 5)

Solubility - Water: Insoluble
- Fat: Soluble
Coefficient of Water/Oil Solubility: <<1
Partition Coefficient (n-octanol/water): >>1

Autoignition Temperature: (see Section 5)
Flammability Classification: (see Section 5)
Unusual Fire or Explosion Hazards: (see Section 5)
Oxidising Properties: Not Applicable.
Other Information: None Known.
Note: The physical data represented above are typical values and should not be construed as a specification.

Section 10 Stability and Reactivity

Chemical Stability: Stable
Conditions to Avoid: None known
Hazardous Polymerization: Will Not Occur
Chemicals to Avoid: Strong oxidizers, acids, bases
Hazardous Decomposition Products (non-thermal): Not determined

Section 11 Toxicological Information

Sensitization to Product: Not Applicable.
Irritancy of Product: Fumes possibly irritating to eyes and respiratory tract.
Reproductive Toxicity: Not Applicable.
Teratogenicity: Not Applicable.
Mutagenicity: Not Applicable.

Further hazard information, if applicable, may be found in Section 3. Toxicological information regarding individual ingredients, if applicable, may be found in Section 2.

Section 12 Ecological Information

Mobility: Not Determined.
Degradability: Not Determined.
Accumulation: Not Determined.
Ecotoxicity: Not Determined.
Other Adverse Effects: Not Determined.

Section 13 Disposal Considerations

Dispose of in accordance with all applicable regulations.

The conditions of handling, storage, and use of this product are beyond our control and may be

beyond our knowledge. For this and other reasons, LA-CO Industries, Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

Section 14 Transport Information

D.O.T. (U.S.)
Proper Shipping Name: Not Regulated.
Hazard Class or Division: Not Regulated.
Hazard Label: Not Regulated.
I.D. Number: Not Regulated.

TDG (Canada): Not Regulated.
IATA: Not Regulated.
ICAO: Not Regulated.
IMO: Not Regulated.

Australian Code for the Transport of Dangerous Goods
Dangerous Goods Class and Subsidiary Risk: Not Determined**.**

Section 15 Regulatory Information

Footnotes for Section 2:
1 Subject to the reporting requirements of SARA Title III, Section 313.
2 Appears on the California Safe Drinking Water and Toxic Enforcement Act (Prop. 65) Substances List.
3 Appears on the Massachusetts Substances List.
4 Appears on the New Jersey Right-To-Know Hazardous Substances List.
5 Appears on the Pennsylvania Hazardous Substances List.
6 Appears on the Canadian WHMIS Ingredient Disclosure List.

U.S.A.

OSHA Hazard Status: This product is considered to be hazardous as defined by the U.S. OSHA HCS (29 CFR 1910.1200).
EPA SARA sec. 311/312 Hazard Categories: Immediate (Acute) Health Hazard.
Toxic Substances Control Act (TSCA): All ingredients contained in this product are listed on the U.S. EPA TSCA Chemical Substance Inventory.
HMIS® Rating: Health 1, Flammability 1, Reactivity 0
NFPA® (704) Rating: Health 1, Flammability 1, Reactivity 0

CANADA

WHMIS Status: This product is considered to be hazardous as defined by Canadian WHMIS Controlled Products Regulations.
WHMIS Rating: D1-B
WHMIS Risk Phrases: None required on containers of 100 ml or less per CPR, Section 19[1][a]-[d].
WHMIS Precautionary Statements: None required on containers of 100 ml or less per CPR, Section 19[1][a]-[d].
Domestic Substances List (DSL): All ingredients contained in this product are listed on the Canadian EPA (CEPA) Domestic Substances List (DSL).

E.U.

European Inventory of Existing Chemical Substances (EINECS): All ingredients contained in this product are listed on the European Inventory of Existing Chemical Substances (EINECS).
Categories of Danger (Labeling Information): None.
Risk (R) Phrases: Not required per regulation 9(7) or 9(8) of CHIP.
Safety (S) Phrases: Keep out of reach of children (S2), Do not breath fumes (S23)

Further regulatory information regarding individual ingredients, if applicable, may be found in Section 2.

This product has been classified in accordance with the hazard criteria of the U.S. OSHA Hazard Communication Standard, the Canadian WHMIS Controlled Products Regulations, the British CHIP2 regulation 6, and the Australian NMRCWHS. This MSDS contains the information required by the above regulations and conforms to ANSI Z400.1-1993.

Section 16 Other Information

HMIS is a registered trademark of the National Paint and Coatings Association.

NFPA is a registered trademark of the National Fire Protection Association.

MSDS Prepared By: Director of Chemical Safety

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.

Section 1 Product and Company Identification

Product Name: **H Paintstik – Black, Green & Yellow**
Revision #: 2.2 **Date Prepared:** January 1, 1997 **Date Revised:** February 5, 2010

Manufacturer:

LA-CO INDUSTRIES, Inc./*Markal* Co.
1201 Pratt Blvd.
Elk Grove Village, IL, USA 60007-5746
Information Telephone: 847-956-7600
Emergency Telephone: Call CHEMTREC
USA 800-424-9300
International (Call Collect) 1-703-527-3887
Chemical Formula: Mixture
CAS No.: Not Applicable. **Derivation:** Not Applicable.
Synonyms: Not Applicable.
General Use: Marking crayon for hot metal surfaces.

Supplier/Importer:

Section 2 Composition/Information on Ingredients

Ingredient	CAS No.	%
Sebacic Acid	111-20-6	30-50
H Paintstik BLACK only Carbon Black [3,4,5,6] ACGIH: TWA = 3.5 mg/kg, OSHA: TWA = 3.5 mg/kg	1333-86-4	2
H Paintstik GREEN only Cobalt Titanate Green Spinel This pigment contains the following heavy metals. The percent amounts listed represent the amount of these heavy metals contained in the H Green Paintstik.	68186-85-6	9
Antimony and compounds, as Sb [1,3,4,5,6] ACGIH: TWA = 0.5 mg/m^3, OSHA: TWA = 0.5 mg/m^3 EPA: CERCLA RQ = 5000 lbs.; EPCRA sec. 313 de minimus concentration = 1.0%	7440-36-0	0.4
Cobalt [1,2,3,4,5,6] ACGIH: TWA = 0.05 mg/m^3, OSHA: TWA = 0.1 mg/m^3 EPA: EPCRA sec. 313 de minimus concentration = 1.0%	7440-48-4	1
Nickel [1,2,3,4,5,6] ACGIH: TWA = 1 mg/m^3, OSHA: TWA = 1 mg/m^3 EPA: CERCLA RQ = 100 lbs.; EPCRA sec. 313 de minimus concentration = 0.1%	7440-02-0	2
Zinc [1,3,4,5] EPA: CERCLA RQ = 1000 lbs.; EPCRA sec. 313 de minimus concentration = 1.0% (fume and dust)	7440-66-6	1.5
This pigment is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.		
H Paintstik YELLOW only Nickel Antimony Titanium Yellow Rutile This pigment contains the following heavy metals. The percent amounts listed represent the amount of these heavy metals contained in the H yellow Paintstik.	8007-18-9	25
Antimony and compounds, as Sb [1,3,4,5,6] (See above for regulatory information)	7440-36-0	2.8

Nickel [1,2,3,4,5,6]	7440-02-0	1

(See above for regulatory information)

This pigment is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.

(For Section 2 footnotes: See Section 15)

Section 3 Hazards Identification

EMERGENCY OVERVIEW: FUMES MAY CAUSE IRRITATION.
KEEP OUT OF REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY.

POTENTIAL HEALTH EFFECTS

Primary Exposure Routes: Eyes, Inhalation

Acute Effects

Eyes: Fumes may cause irritation.
Skin: None expected.
Ingestion: None expected.
Inhalation: Inhalation of fumes may cause irritation of the nose and throat.

Chronic Effects

Eyes: None known
Skin: None known
Ingestion: None known
Inhalation: None known

Carcinogenicity:

Carbon Black (H Paintstik BLACK only):

ACGIH: Carbon Black has been identified by other sources as a suspected or confirmed human carcinogen.

IARC: Carbon Black is not classifiable as a human carcinogen (Group 3); human evidence is inadequate; animal evidence is inadequate.

Nickel compounds and insoluble compounds (H Paintstiks GREEN and YELLOW only):

ACGIH: ACGIH states that this substance has been identified by other sources as a suspected or confirmed human carcinogen.

IARC: Although IARC has assigned an overall evaluation to metallic nickel (Group 2B) and nickel compounds (Group 1), it has not assigned an overall evaluation to all substances within this group.

Target Organ Effects: Not Applicable.
Medical Conditions Aggravated by Long-Term Exposure: Not Determined.
Other Information: Not Applicable.

Section 4 First Aid

Eye Contact: Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Remove any contact lenses. Have victim roll eyes for more thorough flushing. Get medical attention if irritation persists.

Skin Contact: Flush skin with water or wash with soap and water. Consult physician if irritation develops.

Ingestion: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. Give victim water to dilute.

Inhalation: Remove victim to fresh air. Give oxygen if breathing is difficult. Give artificial respiration if breathing has stopped. Get medical attention.

Other Information: None known

Section 5 Fire Fighting Measures

Flash Point (method): 304^{0}F/151^{0}C (cc)
Autoignition Temperature: 1058^{0}F/570^{0}C
LEL: Not Determined. **UEL:** Not Determined.
Flammability Classification: Not Determined.
Extinguishing Media: Water fog, foam, carbon dioxide, dry chemical.
Hazardous Combustion Products: Carbon monoxide and possibly other toxic fumes.
Unusual Fire or Explosion Hazards: None known.
Fire-Fighting Instructions/Equipment: Keep personnel removed and upwind of any fire. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Section 6 Accidental Release Measures

Use recommended personal protective equipment (see Section 8).
Small Spill: Sweep or scrape up. **Large Spill:** Sweep or scrape up.

Section 7 Handling and Storage

Handling Precautions: Use recommended personal protective equipment (see Section 8). Wash thoroughly after handling.
Storage Requirements: Store away from incompatible chemicals (see Sec. 10). Store in a cool, dry area.

Section 8 Exposure Controls/Personal Protection

Eye/Face Protection: Safety glasses. Where contact with the eyes is likely, use chemical goggles. Use a face shield as needed.
Skin/Hand Protection: Suitable for related activities where this product is used.
Respiratory Protection: Use a NIOSH/MSHA approved air-purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use a positive pressure air supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respiratory protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Other Equipment: Eyewash and safety shower.
Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control sources of dust or fumes.
Administrative Controls: Users of this product must be properly trained and qualified in its use.
Other Information: No food or beverage should be consumed in the work area. Wash thoroughly before eating, drinking, or smoking.

Section 9 Physical and Chemical Properties

Appearance/Physical State: Solid cylindrical crayon.
Odor: Not Applicable.
Odor Threshold (ppm): Not Determined.
Specific Gravity (H_2O = 1): >1

Solubility - Water: Insoluble
- Fat: Soluble
Coefficient of Water/Oil Solubility: <<1
Partition Coefficient (n-octanol/water): >>1

pH: Not Applicable.
Melting Point: Approximately 150^{0}F/66^{0}C
Boiling Point: Not Determined.
Vapor Pressure (mm Hg at 20^{0}C): Not Applicable.
Vapor Density (Air = 1): Not Applicable.
Evaporation Rate (n-BuAc=1): Not Applicable.
V.O.C.: 0%(w/w), 0%(v/v), 0 lbs./gal.(U.S.), 0 kg/l
Flash Point (method): (see Section 5)
Autoignition Temperature: (see Section 5)
Flammability Classification: (see Section 5)
Unusual Fire or Explosion Hazards: (see Section 5)
Oxidising Properties: Not Applicable.
Other Information: None Known.
Note: The physical data represented above are typical values and should not be construed as a specification.

Section 10 Stability and Reactivity

Chemical Stability: Stable
Conditions to Avoid: None known
Hazardous Polymerization: Will Not Occur
Chemicals to Avoid: Strong oxidizers, acids, bases
Hazardous Decomposition Products (non-thermal): Not determined

Section 11 Toxicological Information

Sensitization to Product: Not Applicable.
Irritancy of Product: Fumes possibly irritating to eyes and respiratory tract.
Reproductive Toxicity: Not Applicable.
Teratogenicity: Not Applicable.
Mutagenicity: Not Applicable.

Further hazard information, if applicable, may be found in Section 3. Toxicological information regarding individual ingredients, if applicable, may be found in Section 2.

Section 12 Ecological Information

Mobility: Not Determined.
Degradability: Not Determined.
Accumulation: Not Determined.
Ecotoxicity: Not Determined.
Other Adverse Effects: Not Determined.

Section 13 Disposal Considerations

Dispose of in accordance with all applicable regulations.

The conditions of handling, storage, and use of this product are beyond our control and may be beyond our knowledge. For this and other reasons, LA-CO Industries, Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

Section 14 Transport Information

D.O.T. (U.S.)
Proper Shipping Name: Not Regulated.
Hazard Class or Division: Not Regulated.
Hazard Label: Not Regulated.
I.D. Number: Not Regulated.

TDG (Canada): Not Regulated.
IATA: Not Regulated.
ICAO: Not Regulated.
IMO: Not Regulated.

Australian Code for the Transport of Dangerous Goods
Dangerous Goods Class and Subsidiary Risk: Not Determined**.**

Section 15 Regulatory Information

Footnotes for Section 2:

1 Subject to the reporting requirements of SARA Title III, Section 313.
2 Appears on the California Safe Drinking Water and Toxic Enforcement Act (Prop. 65) Substances List.
3 Appears on the Massachusetts Substances List.
4 Appears on the New Jersey Right-To-Know Hazardous Substances List.
5 Appears on the Pennsylvania Hazardous Substances List.
6 Appears on the Canadian WHMIS Ingredient Disclosure List.

U.S.A.

OSHA Hazard Status: This product is considered to be hazardous as defined by the U.S. OSHA HCS (29 CFR 1910.1200).
EPA SARA sec. 311/312 Hazard Categories: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard.
Toxic Substances Control Act (TSCA): All ingredients contained in this product are listed on the U.S. EPA TSCA Chemical Substance Inventory.
HMIS® Rating: Health 1*, Flammability 1, Reactivity 0
NFPA® (704) Rating: Health 2, Flammability 1, Reactivity 0

CANADA

WHMIS Status: This product is considered to be hazardous as defined by Canadian WHMIS Controlled Products Regulations.
WHMIS Rating: D1-B, D2-B
WHMIS Risk Phrases: None required on containers of 100 ml or less per CPR, Section 19[1][a]-[d].
WHMIS Precautionary Statements: None required on containers of 100 ml or less per CPR, Section 19[1][a]-[d].
Domestic Substances List (DSL): All ingredients contained in this product are listed on the Canadian EPA (CEPA) Domestic Substances List (DSL).

E.U.

European Inventory of Existing Chemical Substances (EINECS): All ingredients contained in this product are listed on the European Inventory of Existing Chemical Substances (EINECS).
Categories of Danger (Labeling Information): Xn: Harmful
Risk (R) Phrases: Not required per regulation 9(7) or 9(8) of CHIP.
Safety (S) Phrases: Keep out of reach of children (S2), Do not breath fumes (S23)

Further regulatory information regarding individual ingredients, if applicable, may be found in Section 2.

This product has been classified in accordance with the hazard criteria of the U.S. OSHA Hazard Communication Standard, the Canadian WHMIS Controlled Products Regulations, the British CHIP2 regulation 6, and the Australian NMRCWHS. This MSDS contains the information required by the above regulations and conforms to ANSI Z400.1-1993.

Section 16 Other Information

HMIS is a registered trademark of the National Paint and Coatings Association.

NFPA is a registered trademark of the National Fire Protection Association.

MSDS Prepared By: Director of Chemical Safety

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.