MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF SUBSTANCE & COMPANY PREPARING INFORMATION

Identity: HM-4 Waxy Black

Manufacturer's Name: Minnesota Clay

Address: 2960 Niagara Lane, Plymouth MN 55447

Tel Phone: (763) 432-0875 Emergency Tel: None

Date Prepared: July 29, 2011 Replaces MSDS dated: N/A

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS	EXPOSURE LIMITS		LD ₅₀	LC ₅₀
	NUMBER	(mg/m^3)		mg/kg	mg/m ³
		PEL	TLV		
Clay/Kaolin	1332-58-7	15	2	NA	NA
Silica (Quartz)	14808-60-7	10mg/m ³	0.025	NA	NA
		%Silica+2			
Cobalt	7440-48-4	.01	.02	NA	NA
Compounds					
Calcium	1317-65-3	5	10	NA	NA
Carbonate					
Zinc	7440-66-6	5	5	NA	NA
Compounds					
Manganese or	7439-96-5	5 Ceiling	.2	NA	NA
Mang.					
Compounds					

SECTION 3 - HAZARD IDENTIFICATION

Primary Route of Entry - Inhalation (dry form only), ingestion and dermal.

Hazards - May cause skin and eye irritation, Lung effects including cancer, silicosis

Silica, Crystalline (Quartz)

A single exposure will not result in serious adverse health effects.

Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans. There are some studies that show excess numbers of cases of scleroderma and other connective tissue disorders in workers exposed to respirable crystalline silica. Silicosis increases the risk of tuberculosis. There are some studies that show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica.

Cobalt or Cobalt Compounds

Exposure to cobalt compounds may cause sensitization by inhalation and skin contact. Dust from handling can cause irritation of nose and throat. Prolonged exposure could cause serious respiratory illness and lung damage. Sensitized persons may develop wheezing and shortness of breath. Can also cause an allergic skin rash in some individuals. Avoid breathing dust. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation.

Calcium Carbonate

Overexposure may result in irritation to eyes, skin and respiratory system. Chronic exposure may result in hyperclacemica, alkalosis, and renal impairment. Animal studies suggest that inhalation may enhance susceptibility to respiratory infection.

Zinc or Zinc Compounds

May causes skin irritation if in contact for extended periods of time.

Manganese or Manganese Compounds

Acute effects of exposure: Exposure via inhalation to heavy concentrations of dusts containing manganese compounds for as little as three months have affected the central nervous system as manganese poisoning. Chronic effects of exposure: Excessive, long-term inhalation of airborne mineral dusts and particulate may contribute to the development of bronchitis, reduced breathing capacity, and may lead to the increased susceptibility to lung disease. Manganese poisoning: The excessive, chronic inhalation of manganese compounds usually begins with complaints of languor and sleepiness. This is followed by weakness in the legs and the development of stolid, mask-like faces. The patient speaks with a slow monotonous voice. Then muscular twitching appear, varying from a fine tremor of the hands to coarse, rhythmical movements of the arms, legs, and trunk. There is a slight increase in tendon reflexes, ankle and patellar clonus, and a typical Parkinsonian slapping gait.

SECTION 4 - FIRST-AID MEASURES

Inhalation - Remove from exposure.

Dermal - Wash skin with soap and water.

Eye - Flush eyes with large quantities of water for at least 15 minutes. If

irritation is present after washing, contact a physician.

Ingestion- Do not induce vomiting, contact a physician.

SECTION 5 - FIRE-FIGHTING MEASURES

Special Fire-Fighting Procedure - None

Unusual Fire or Explosion Hazards - None

Extinguishing Media - None

Hazardous Combustion Products - Unknown

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Procedures for Leaks or Spills - place in suitable container, and provide adequate ventilation. Wear personnel protective equipment (Goggles, glove, personal protective clothing).

SECTION 7 - HANDLING AND STORAGE

Engineer Control – use adequate ventilation

Procedure/Equipment - no specific requirement. See personal protective equipment.

Work Practices - use with adequate ventilation, avoid skin, eye and inhalation contact, wash hands

Storage - Store in tightly closed container. Store in a cool well-ventilated area.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures – provide adequate ventilation

Personal Protective Equipment - wear chemical safety goggles, protective chemical resistant gloves, appropriate protective clothing

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance - Powder

Percent Volatile - N/A

Explosive Properties - N/A

Vapor Density - N/A

Odor and Odor Threshold - N/A

Applicable Evaporation Rate - N/A

Partition Coefficient - N/A

Melting/Softening Point - None

pH - N/A

Freezing Point - N/A

Oxidizing Properties - N/A

Specific Gravity - N/A

Boiling Point - N/A

Flash Point - N/A

Solubility in Water - No

Flammable Limits - N/A

Vapor Pressure - N/A

Auto-Ignition Temperature - N/A

SECTION 10 - STABILITY AND REACTIVITY

Stability - Unknown Hazardous Polymerization - None Hazardous Decomposition Products - None

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazard to Humans - There is no toxicity data on this mixture. Likely to be a skin and eye irritant. Inhalation of dust may cause lung effects.

Animal Experiment - There is no toxicity data on this mixture

Acute – Likely to be a skin and eye irritant

Chronic/Other - Inhalation may cause lung effects. Contends quartz, which can cause silicosis and is a potential carcinogen.

SECTION 12 - ECOLOGICAL INFORMATION

No specific information available.

SECTION 13 - DISPOSAL INFORMATION

Dispose according to local regulations, No specific information available

SECTION 14 - TRANSPORTATION INFORMATION

No specific information available

SECTION 15 - REGULATORY INFORMATION

Ingredients are listed on TSCA, DSL and EINECS inventories.

Quartz and cobalt are listed on IARC, NTP, OSHA and/or Calif. Prop 65 cancer lists.

No specific other information available

SECTION 16 - OTHER INFORMATION

Conforms to D 4236

No other specific information available