



Material Safety Data Sheet

Updated January 2013

SKM Industries, Inc.

Health 2

Reactivity 0

Flammability 2 Personal Protection B

SECTION 1 – CHEMICAL AND COMPANY IDENTIFICATION

Identity: Pump Action Fiber Tip Super Met-Al High Temperature Marker Fiber Tip Item No: 04501 Metal Tip Item No: 04505 Color: white, yellow, black, silver Formula:	<i>Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i>
Another Exclusive Product of: SKM Industries, Inc.	Emergency Telephone Number 800-424-9300 (Chemtrec)
Address (Number, Street, City, State, and ZIP Code) 1012 Underwood Road, PO Box 278 Olyphant, PA 18447 USA	Telephone Number for Information 570-383-3062
	Date Prepared January 4, 2011

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	OSHA PEL	ACGIH-TLV	Other Limits Recommended	%(Opt.)
Aromatic Hydrocarbon	64742-95-6	TWA 100 ppm	TWA 100 ppm	No data	30 - 60
Xylene	1330-20-7	TWA 100 ppm	TWA 100 ppm	No data	1 - 20
Ethyl Benzene	100-41-4	TWA 100 ppm	TWA 100 ppm	No data	1 - 10
1,2,4, Trimethyl Benzene	95-63-6	TWA 100 ppm	TWA 100 ppm	No data	1 - 10
May contain one or more of the following					
Titanium Dioxide	13463-67-7	TWA 10 mg/m3	TWA 10 mg/m3	Nuisance dust*	20 - 30
Zinc Borosilicate Frit	65997-18-4	TWA 10 mg/m3	TWA 10 mg/m3	Nuisance dust*	20 - 30
Pigment Yellow 34	1344-37-2	TWA .05 mg/m3 as Lead	TWA .05 mg/m3 as Lead and 0.012mg/m3 as Chromium	Nuisance dust*	15 - 25
C. I. Pigment Black 27	68186-97-0	TWA 0.1 mg/m3	TWA 0.5 mg/m3	Nuisance dust*	10 - 20
Carbon Black	1333-86-4	TWA 3.5 mg/m3	TWA 3.5 mg/m3	Nuisance dust*	1 - 10

Aluminum	749-90-5	PEL 15 mg/m3 Total Dust PEL 5 mg.m3 Respirable Dust	TWA 1 mg/m3 Respirable fraction	Total Dust Respirable Dust	Not available
*Nuisance dust as free dust only, not as bound in paint or ink.					

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Opaque thin viscosity liquid with aromatic odor. Warning! Combustible liquid and vapor. Keep away from heat sparks and flames. May cause eye, skin and respiratory tract irritation. If swallowed do not induce vomiting. Get immediate medical attention.

POTENTIAL HEALTH EFFECTS

Eyes: Liquid is moderately irritating to the eyes.

Skin: Liquid is mildly irritating to the skin. Ingestion: Ingestion of liquid may cause vomiting.

Inhalation: High concentration of vapors may produce irritation of the respiratory tract, headache, dizziness, and nausea.

CHRONIC HEALTH EFFECTS

Prolonged or repeated contact may cause skin sensitization or dermatitis. Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating or inhaling this product may be harmful or fatal. IARC (International Agency for Research of Cancer) has classified Ethyl Benzene and Carbon Black as a possible human carcinogen (2B). As noted in OSHA lead standard, repeated and prolonged exposures may cause delayed effects involving the blood, gastro-intestinal, nervous and reproductive systems.

SECTION 4 FIRST AID MEASURES

Eyes – Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation – Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Skin – Flush skin with plenty of water. Remove contaminated clothing and shoes.

Ingestion – If large quantities of this material are swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point 108°F

Flammable Limits: LEL 1.9

UEL 12.6

Extinguishing Media - Use water fog, foam, dry chemical or CO2. Use water spray to cool fire-exposed containers and to protect personnel.

Special Fire Fighting Procedures - Keep containers cool and vapors down with water spray. Prevent spill from entering drains, sewers, streams or other bodies of water. If run-off occurs, notify proper authorities. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots); including a positive pressure NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards – Vapors are heavier than air and may travel along ground, or be moved by ventilation and be ignited by ignition source.

SECTION 6 ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid with non-combustible floor absorbent and place in non-leaking container; seal properly and dispose of properly in compliance with federal, state, and local regulations.

LARGE SPILL: Evacuate area of unprotected personnel. Eliminate all ignition sources. Stop spill at source if safe to do so. Handling equipment must be grounded to prevent sparking. Prevent spill from entering drains, sewers, streams or other bodies of water. If run-off occurs, notify proper authorities. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Dispose of properly in compliance with federal, state, and local regulations.

SECTION 7 HANDLING AND STORAGE

HANDLING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, sparks, flames, static electricity, or other sources of ignition. Many hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as “auto ignition” or ignition temperatures. Ignition temperatures decrease with increasing vapor volume and vapor volume and vapor/air contact time, and are influenced by pressure changes. Ignition of organic chemical vapors may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

STORAGE: Keep away from heat, sparks and open flames. Keep out of reach of children. Keep container tightly sealed when not in use. Store in cool, well-ventilated place away from incompatible materials. Information on this Material Safety Data Sheets refers to ink used in pens and markers; however, it applies to these inks in bulk. The inks are contained in capillary or valve reservoirs and will not spill or leak under normal conditions.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Type) – Not usually necessary. Use with adequate ventilation. Use NIOSH/MSHA approved respirator if PELs or TLVs are exceeded.

Protective Gloves – Chemical resistant gloves if skin contact is possible (consult your safety equipment supplier).

Eye Protection – Not normally required if used as intended. Wear chemical splash goggles in compliance with OSHA regulation if splashing is possible.

Other Protective Clothing or Equipment - Not usually necessary. For bulk material, if direct contact is possible, wear apron, boots, face shield, etc. as needed.

Work/Hygienic Practices -Follow label instructions. Wash hands after use and before eating, drinking, smoking, using restrooms, etc.

SECTION 9 PHYSICAL AND CHEMICAL

PROPERTIES

Boiling Point	318 to 338oF	Specific Gravity (H2O = 1) @70o F	>1
Vapor Pressure (mm-Hg @ 70o F)	No Data	Melting Point	No Data
Vapor Density (AIR = 1)	Greater than one (1)	Evaporation Rate (Butyl Acetate = 1)	Less than one (1)
Solubility in Water	Negligible	pH	No Data
Appearance and Odor – Opaque thin viscosity liquid with aromatic odor.			
VOC: COLOR	GRAMS PER LITER	% BY WEIGHT	
Black	642	57.63	
White	666	52.35	
Yellow	700	58.69	

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability - Stable -**Conditions to Avoid** – None known.

Incompatibility (Materials to Avoid) -Strong oxidizing and reducing agents, strong alkalis and strong acids.

Hazardous Decomposition or Byproducts - Carbon dioxide, carbon monoxide, smoke, soot and various organic oxidation by-products.

Hazardous Polymerization - Will Not Occur -**Conditions to Avoid** - No data

SECTION 11 TOXICOLOGICAL INFORMATION

Please refer to Section 3 for available information on potential health effects.

SECTION 12 ECOLOGICAL INFORMATION

Exotoxicological Data: Aluminum 7429-90-5 –LC50 Rainbow trout, Donaldson trout, 0.12 mg/l 96.00 hours

Ecotoxicity: Components of this product have been identified as having potential environmental concerns

Persistence and degradability: Not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal regulations.

SECTION 14 TRANSPORT INFORMATION (Not meant to be all inclusive)

Domestic Highway (Containers < 1 Quart are ORM-D)	Domestic Air Shipments (Pens)
Proper Shipping Name: Ink/Paint	Proper Shipping Name: Consumer Commodity
Hazard Class/Subsidiary Hazard: 3	Hazard Class/Subsidiary Hazard: 9
UN/NA No.: UN1263	UN/NA No.: I.D. 8000
Packing Group: III	Packing Group: None
Label Required: Combustible Liquid (2)	Label Required: Class 9

SECTION 15 REGULATORY INFORMATION (Not meant to be all inclusive - selected regulations represented)

U.S. FEDERAL REGULATIONS:

Carcinogenicity: NTP? No IARC Monographs? 2B OSHA Regulated? No

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

SECTION 313: This product contains Aluminum (7429-90-5), Xylene (1330-20-7), Ethyl Benzene (100-41-4) Pigment Yellow34(1344-37-2), CI Pigment Black 27(68186-97-0), and 1,2,4, TriMethyl Benzene (95-63-6) which are listed and may require reporting under SARA Title III Sec. 313 if used over the threshold reporting quantity. This information must be included in all MSDSs that are copied and distributed for this material.

INTERNATIONAL REGULATIONS: CANADIAN WHMIS: Not WHMIS controlled (pens) Bulk: Class B2, D2A

STATE REGULATIONS: CALIFORNIA PROPOSITION 65: -This product contains a chemical known to the State of California to cause cancer. Benzene, Ethyl benzene. This product contains chemicals known to the State of California to cause birth defects or other reproductive harm. Toluene, Benzene, Nickel, Quartz Silica, Lead and Chromium.

Pennsylvania RTK: Hazardous Substance. Listed Substance. Aluminum 7429-90-5 Listed

SECTION 16 OTHER INFORMATION

MSDS Status: Revised Section(s):

WARNING! The use of this product is beyond the control of the manufacturer and distributor; therefore, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The user must assume all responsibility,

including injury or damage, resulting from its misuse as such, or in combination with other materials. The manufacturer and distributor warrant only that this product meets the specifications for such product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER OF THIS PRODUCT. THE MANUFACTURER AND DISTRIBUTOR SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF THIS PRODUCT. The sole and exclusive remedy against the manufacturer and distributor for breach of warranty shall be reimbursement of the purchase price of the product in the event that a defective condition of the product shall be found to exist. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.