

Material Safety Data Sheet

HMIS®



HEALTH

2

REACTIVITY

0

FLAMMABILITY

3

PERSONAL PROTECTION

B

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identity: Dykem/Brite-Mark All Colors

Item No.: Black(40003, 41003, 84002), Blue(40001, 41001,84001), Brown(40007, 84010), Gold(40014, 41014, 84051), Green(40004, 41004, 77007, 84007,), Light Blue(84008), Orange(40010, 41010, 84005,), Pink(40009, 84009), Red(40002, 41002, 84006), Silver(40016, 41016, 84050), Violet(40045, 41045, 84019), White(40008, 41008,84003), Yellow(40006, 41006, 84004).

Other Names: 916, PM40, and Fine Line.

Formula: A720M(Black), A788M(Blue), A786M(Brown), A946M(Gold), A789M(Green), A783M(Light Blue), A790M(Orange), A787M(Pink), A791M(Red), A945M(Silver), A785M(Violet), A718M(White), A719M(Yellow).

Another Exclusive Product of: ITW Dykem	Emergency Telephone Number 1-800-535-5053 (Domestic), 1-352-323-3500 (International)
Address (Number, Street, City, State, and ZIP Code) 805 East Old 56 Highway Olathe, KS 66061-4914	Telephone Number for Information 1-800-443-9536 or 1-913-397-9889
Product Class: Solvent based marker.	Date Prepared 9/21/12
	Signature of Preparer (Optional) Regulatory Dept.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS No.	OSHA PEL	ACGIH-TLV	Other Limits Recommended	%(Opt.)
Butyl Acetate	123-86-4	TWA 150 ppm	TWA 150 ppm	No data	35 - 80
1-Methoxy-2-Propanol Acetate	108-65-6	No data	No data	No data	1 - 30
Aromatic Naptha, Light	64742-95-6	TWA 100ppm	No data	No data	1 - 10
May contains one or more of the following.....					
Aluminum Flake	7429-90-5	TWA 15 mg/m3	TWA 10 mg/m3	Nuisance dust*	10 - 20
Copper	7440-50-8	TWA 1 mg/m3	TWA 1 mg/m3	Nuisance dust*	10 - 20
Titanium Dioxide	13463-67-7	TWA 10 mg/m3	TWA 10 mg/m3	Nuisance Dust*	1 - 40
Diarylide Yellow	5468-75-7	No data	No data	Nuisance dust*	1 - 20
Phthalocyanine Blue	Mixture	No data	No data	Nuisance dust*	1 - 20
Copper Compounds	147-14-8	TWA 0.1 mg/m3	TWA 0.2 mg/m3	Nuisance dust*	1 - 10
Isopropyl Alcohol	67-63-0	TWA 400ppm	TWA 400ppm	No data	1 - 10
Carbon Black	1333-86-4	TWA 3.5 mg/m3	TWA 3.5 mg/m3	Nuisance dust*	1 - 10
C.I. Pigment Violet 1	1326-03-0	No data	No data	Nuisance dust*	1 - 10
Green Pigment	1328-53-6	No data	No data	Nuisance dust*	1 - 10
Red Pigment	5280-66-0	No data	No data	Nuisance dust*	1 - 10
Manganese Compounds	7439-96-5	TWA 5 mg/m3	TWA 0.2 mg/m3	Nuisance dust*	1 - 10
Disazo Orange	15793-73-4	No data	No data	Nuisance dust*	1 - 10

*Nuisance dust as free dust only, not as bound in paint or ink.

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Warning! Flammable 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 Carbon Black and Titanium Dioxide as a possible human carcinogen (2B).

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 (Method Used)	Flammable Limits	LEL	UEL
81° F (TCC)		1.7	7.6

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 “autoignition” 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.

Engineering Controls	Local Exhaust Mechanical (General)	Not usually needed Yes	Special Other	None None
-----------------------------	---	---------------------------	----------------------	--------------

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	252°F	Specific Gravity (H₂O = 1) @70° F	>1
Vapor Pressure (mm-Hg @ 70° 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	Slight	pH	No Data

Appearance and Odor – Opaque thin viscosity liquid with sweet odor.

VOCs:

FORMULA#/COLOR	GRAMS PER LITER	% BY WEIGHT	FORMULA#/COLOR	GRAMS PER LITER	% BY WEIGHT
A720M Black	672	66.61	A946M Gold	689	59.75
A786M Brown	712	67.78	A783M Light Blue	588	50.34
A789M Green	725	69.77	A790M Orange	647	65.48
A787M Pink	637	48.62	A791M Red	671	66.17
A945M Silver	714	71.68	A785M Violet	771	76.57
A718M White	627	47.85	A719M Yellow	716	68.20
A788M Blue	694	68.83			

SECTION 10 STABILITY AND REACTIVITY

Chemical	Unstable		Conditions to Avoid – None known.
Stability	Stable	X	
Incompatibility (Materials to Avoid) - Strong oxidizing and reducing agents, strong alkalies and strong acids.			
Hazardous Decomposition or Byproducts - Carbon dioxide, carbon monoxide, smoke, soot and various organic oxidation by-products.			
Hazardous Polymerization	May Occur		Conditions to Avoid - No data
	Will Not Occur	X	

SECTION 11 TOXICOLOGICAL INFORMATION

	<u>Oral LD50 (Rat)</u>	<u>Dermal LD50 (Rabbit)</u>	<u>Inhalation LC50 (Rat)</u>
Butyl Acetate	No data	No data	No data
1-Methoxy-2-Propanol Acetate	>1000 mg/kg	No data	No data

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

SECTION 12 ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

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: Paint	Proper Shipping Name: Varies
Hazard Class/Subsidiary Hazard: 3	Hazard Class/Subsidiary Hazard: Varies
UN/NA No.: UN1263	UN/NA No.: Varies
Packing Group: III	Packing Group: Varies
Label Required: Flammable Liquid (3)	Label Required: Varies

SECTION 15 REGULATORY INFORMATION (Not meant to be all inclusive - selected regulations represented)**U.S. FEDERAL REGULATIONS:**

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

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

SECTION 313: This product does not contain toxic chemicals that 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: B2, D2B, D2A

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: Warning: This product contains trace quantities of Lead, Nickel, Arsenic, Cadmium and Toluene, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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.