CURR198

HILLSBORO ELEMENTARY SCHOOLS
215 S.E. 6th Ave.
HILLSBORO, OR 97123

MATERIAL SAFETY DATA SHEET 0T 0037

NAME: EL MARKO PERMANENT MARKER (FLAIR)
CAS NO: NA

REVISION 1
Effective Date: February 1, 1985

A. IDENTIFICATION

Composition*	%	Formula: NA
Dyes Solvents Methyl Cellosolve® (109-86-4) n-Hexyl Carbitol® (112-59-4)		Molecular Weight: NA Synonyms: El Marko Permanent Markers - Brown, Green, Orange, Purple, Red and Yellow

B. PHYSICAL DATA

Boiling Point	Melting Point	Freezing Point
258 °F 124.4 °C	-121 °F -87 °C	NA °F NA °C
Specific Gravity (H_2O=1)	**Vapor Density (air=1)**	**Vapor Pressure @** (20°C) 68 °F
0.966	2.62	6.2 mmHg
Evaporation (Butyl Acetate =1)	**Saturation in Air** (by volume @ °F)	**Autoignition Temperature**
0.5	NA %	550 °F 288 °C
% Volatiles (by volume)	**Solubility in Water**	**pH**
NA	Miscible	NA

Appearance/Odor: Liquid with mild non-offensive odor

Flash Point and Test Method(s): 102°F (CC); 115°F (OC)

Flammable Limits in Air (% by volume) Lower 2.5 % Upper 19.8 %

C. REACTIVITY

Stability		Conditions to Avoid	Polymerization		Conditions to Avoid
stable	X	NA	may occur		NA
unstable			will not occur	X	

Incompatible Materials	Hazardous Decomposition Products
NA	NA

*IF MULTIPLE INGREDIENTS INCLUDE CAS NUMBERS FOR EACH

NA=NOT AVAILABLE

Footnotes: Physical Data given for Methyl Cellosolve®.

GMEL #413

D. – HEALTH HAZARD DATA

Occupational Exposure Limits (PEL'S, TLV'S, etc.)

None established for product. 8 hr. TWA for Methyl Cellosolve® is 25 ppm (OSHA), 5 ppm (ACGIH). (Skin notations).

Warning Signals

NA

Routes/Effects of Exposure

1. Inhalation

None anticipated under normal use conditions.

2. Ingestion

None anticipated under normal use conditions. If misused, as sucking tip end of marker for extended period of time, some irritation/discomfort may occur.

3. Skin

a. Contact

Contact will dye skin.

b. Absorption

None anticipated under normal use conditions. If large amounts of product come in contact with skin possibility of absorption may exist but not in toxic amounts.

4. Eye Contact

None under normal use conditions. If product contacts eye can expect some conjunctival/corneal irritation.

5. Other

NA

E. – ENVIRONMENTAL IMPACT

1. Applicable Regulations

2. DOT Hazard Class – NA
3. DOT Shipping Name –

Environmental Effects

NA

Engineering Controls

OT 0037

None under normal use conditions.

Eye Protection

None under normal use conditions.

Skin Protection

None under normal use conditions.

Respiratory Protection

None under normal use conditions.

Other

Product is considered safe when used under normal use conditions.

G. WORK PRACTICES

Handling and Storage

Keep cap on marker to prevent solvent evaporation.

Normal Clean Up

Wipe up with tissue, towel, etc. and discard with trash.

Waste Disposal Methods

Dispose as trash.

Steps to be taken if material is released to the environment or spilled in the work area

Not applicable

Fire and Explosion Hazard	Extinguishing Media
Flammable. If large amounts are involved plastic may also give off hazardous decomposition products.	CO_2, Foam, Dry Chemical

Firefighting Procedures

If large amounts of product are involved use self-contained breathing apparatus and other protective gear.

FIRST AID AND MEDICAL EMERGENCY PROCEDURES

Eyes

Flush eyes immediately with water for at least five minutes. If irritation persists consult physician.

Skin

Wash with soap and water. Ink stain will eventually wear off.

Inhalation

None for normal use conditions.

Ingestion

Wash mouth out with water. Consult physician if irritation/discomfort persists.

Notes to Physician

NA