

Material Safety Data Sheet
acc. to ISO/DIS 11014

02/25/2002

Revision date: 02/25/2002

1 Identification of substance:

· **Product details:**

· **Trade name: DL / XLM Inks - All Colors and Conditioner**

· **Article number:**

BLACK 1300-463, 0812-073, 0814-073, 0814-074, 0815-073, 0816-074, 0816-078, 1714-101, 1715-101, 1716-101
 BLUE 0834-051, 0834-053, 0834-060, 0845-083
 GREEN 1300-508, 0842-051, 0842-055, 0844-051, 0844-052
 PURPLE 1300-509, 0834-061
 RED 1300-510, 0822-052, 0822-060, 0824-051, 0824-052
 CONDITIONER 1300-484, 0802-502, 0804-504

· **Manufacturer/Supplier:**

Diagraph an ITW Company
 Marking & Stenciling Products Division
 P.O. Box 520
 8233 Ogden Road
 Herrin, IL 62948

Customer Sales & Service:

800-521-3047 USA
 618-993-7910
 618-998-1887 Fax

email: msds@diagraphms.com

· **Emergency information:**

Contact Infotrac: (800) 535 5053 (US only)
 International: +1 352 323 3500

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

111-46-6 Diethylene glycol	80-100%
5413-75-2 C.I. Acid Red 73	0-5%
6359-45-1 2-[2-[4-(diethylamino)phenyl]vinyl]-1,3,3-trimethyl-3H-indolium chloride	0-5%
633-03-4 [4-[4-(diethylamino)benzhydrylene]cyclohexa-2,5-dien-1-ylidene]diethylammonium hydrogensulphate	0-5%

3 Hazards identification

· **Hazard description:**

Harmful

· **Information pertaining to particular dangers for man and environment:**

Harmful if swallowed.

· **Classification system**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

(Contd. on page 2)

Material Safety Data Sheet

acc. to ISO/DIS 11014

02/25/2002

Revision date: 02/25/2002

Trade name: DL / XLM Inks - All Colors and Conditioner

(Contd. of page 1)

- **NFPA Ratings (scale 0-4)**
Health = 1
Fire = 1
Reactivity = 0
- **HMS Rating (scale 0-4)**
Health - 1
Flammability - 1
Reactivity - 0
- **Routes of Entry** Ingestion
- **Target Organs** None known
- **Irritancy** None known
- **Sensitizing Capability** None known
- **Reproductive Effects** None known
- **Cancer Information** Not known to be carcinogenic.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Generally the product does not irritate the skin.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Induce vomiting, if person is conscious. Seek medical help.

5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Maximum storage temperature:** 120 F (49 C)
- **Minimum storage temperature:** 35 F (2 C)

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

02/25/2002

Revision date: 02/25/2002

Trade name: DL / XLM Inks - All Colors and Conditioner

(Contd. of page 2)

- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

- **Form:** Fluid
- **Color:** According to product specification
- **Odor:** Characteristic
- **Change in condition**
 Melting point/Melting range: undetermined
 Boiling point/Boiling range: 245°C (473°F)
- **Flash point:** 146°C (295°F)
- **Ignition temperature:** 225°C (437°F)
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 Lower: 0.7 Vol %
 Upper: 22.0 Vol %
- **Vapor pressure at 20°C (68°F):** 0 hPa
- **Density:** Not determined
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix
- **Solvent content:**
 Organic solvents: 94-97 %
 Note: Conditioner has organic solvent content of 100%
- **Solids content:** 2-6 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

111-46-6 Diethylene glycol

Oral LD50 12565 mg/kg (rat)

Dermal LD50 11890 mg/kg (rbt)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

02/25/2002

Revision date: 02/25/2002

Trade name: DL / XLM Inks - All Colors and Conditioner

(Contd. of page 3)

- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful

12 Ecological information:

- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Comply with all Federal, State, and Local regulations regarding disposal.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.

14 Transport information

- **DOT regulations:** Non-regulated Material
- **Hazard class:** -
- **ERG #** n/a
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

- **Product related hazard information:**
The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:**
Harmful
- **Hazard-determining components of labelling:**
Diethylene glycol
- **Risk phrases:**
Harmful if swallowed.
- **Safety phrases:**
Keep out of the reach of children.
Keep away from food, drink and animal feedingstuffs.
Do not empty into drains.

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

02/25/2002

Revision date: 02/25/2002

Trade name: DL / XLM Inks - All Colors and Conditioner

(Contd. of page 4)

If swallowed, seek medical advice immediately and show this container or label.

- **National regulations**

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

- **Other regulations, limitations and prohibitive regulations**

- **OSHA Regulations**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29 CFR 1910.): Not listed

- **Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Section 313:**

This product does not contain chemicals listed as toxic chemicals at levels which require reporting under SARA Title III Section 313.

- **CONEG:**

Black DL/XLM INK:

This product has been tested for heavy metals covered under the various CONEG laws, and does not contain mercury, lead, cadmium, or hexavalent chromium at levels above reportable thresholds:

Mercury (Hg), total: <0.03mg/kg

Lead (Pb), total: 9.0mg/kg

Cadmium (Cd), total: <1.5mg/kg

Chromium (Cr), total: <4.6mg/kg

Blue DL/XLM INK:

CONEG:

This product has been tested for heavy metals covered under the various CONEG laws and does not contain mercury, lead, cadmium or hexavalent chromium at levels above reportable thresholds:

Mercury (Hg), total: <15 ug/kg

Lead (Pb), total: <2.5 mg/kg

Cadmium (Cd), total: 0.5 mg/kg

Chromium (Cr), total: <1.5 mg/kg

All Other Colors:

These products has not been tested for heavy metals covered under the various CONEG laws. However, raw materials used to make this product do not contain mercury, lead, cadmium, or hexavalent chromium and none are added during manufacture.

- **Toxic Substances Control Act TSCA Status:**

All components of this product are listed in the EPA's Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA).

- **California Proposition 65 (Chemicals known to cause cancer):**

This product contains no ingredients on the California Proposition 65 List known to cause cancer.

- **California Proposition 65 (Chemicals known to cause reproductive toxicity):**

This product contains no ingredients on the California Proposition 65 List known to cause reproductive toxicity.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Safety / Environmental

- **MSDS Created By:** J. Wells

- **File:** 311

- **Revision Information (All previous revisions obsolete):**

This Revision: 02/25/2002 Updated Company Info., Combined all DL/XLM products onto one MSDS.