

Material Safety Data Sheet

According to 91/155 EC

Printing date 1-15-13

Reviewed on 1-15-13

1 Identification of substance

· **Product Details**

· **Trade name: D-FLO:**

Blue, Green, Lime Green, Yellow, Tangerine, Orange, Neon Orange, Hot Pink, Magenta, Clear White

· **Application of the substance / the preparation:** Printing Inks

· **Manufacturer/Supplier:**

CHEMICAL CONSULTANTS, INC.
1850 WILD TURKEY CIRCLE
CORONA, CA 92880-1799 U.S.A.

· **Telephone**

General: (951) 735 - 5511




Emergency: INFOTRAC - 800-535-5053

2 Composition/Data on components

· **Chemical characterization**

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

· **Hazardous components:**

8052-41-3	Aliphatic hydrocarbon	Danger:  3.6/1B, 3.10/1	10-30%
112945-52-5	Silicon dioxide, chemically prepared	Warning:  3.8/3	0.5-1.5%
	Surfactant	Warning:  3.2/2, 3.3/2A	0.5-1.5%

3 Hazards identification

· **Hazard description:**



Harmful

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

Irritating to eyes and respiratory system.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking

Vapours may cause drowsiness and dizziness

· **Classification system:**

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

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

HEALTH	1	1
FIRE	2	2
REACTIVITY	0	0

· GHS label elements**Danger**

3.10/1 - May be fatal if swallowed and enters airways.

**Warning**

3.3/2A - Causes serious eye irritation.

3.8/3 - May cause respiratory irritation. May cause drowsiness or dizziness.

Warning

2.6/4 - Combustible liquid.

· Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

· Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Do NOT induce vomiting.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO₂, powder or water spray.**· Storage:**

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

· Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

4 First aid measures

· General information: No special measures required.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: Do not induce vomiting; immediately call for medical help.

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- **Information for doctor:**
- **Treatment:** If swallowed or in case of vomiting, danger of entering the lungs.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** Wear fully protective suit.
- **Additional information:** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.
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:**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **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:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

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

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· **Components with limit values that require monitoring at the workplace:**

8052-41-3 Stoddard solvent (10-30%)

PEL 2900 mg/m³, 500 ppm
REL Short-term value: C 1800* mg/m³
Long-term value: 350 mg/m³
*15-min

TLV 525 mg/m³, 100 ppm

57-55-6 Propylene glycol (1-5%)

WEEL 10 mg/m³

· **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.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.

· **Protection of hands:** Solvent resistant gloves

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **General Information**

Form: Liquid
Color: According to product specification
Odor: Acrylic Odor

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100°C (212°F)

· **Flash point:** >212° (cc)

· **Ignition temperature:** 230.0°C (446°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: 1.1 Vol %

Upper: 6.0 Vol %

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- **Vapor pressure at 20°C (68°F):** 23.0 hPa (17 mm Hg)
- **Density at 20°C (68°F):** 8.0-8.6 lb./gal
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
- **Solvent content:**
 - **Volatile organic compounds:** VOC content of material(includes activator): 255-287 grams per liter.
VOC content of coating less water and exempt solvents: 333-395 grams per liter.
 - **Water:** 30-40 %

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:**
 - Nitrogen oxides
 - Carbon monoxide and carbon dioxide

11 Toxicological information

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

12 Ecological information

- **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:**No
- **UN "Model Regulation":** Not Regulated

15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.
- **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):** All ingredients are listed.
- **California Proposition 65**
- **California Proposition 65 chemicals known to cause cancer:**
 - 50-00-0 formaldehyde
 - 140-88-5 ethyl acrylate
 - 924-42-5 N-(hydroxymethyl)acrylamide
 - 79-06-1 acrylamide
- **California Proposition 65 chemicals known to cause reproductive toxicity:**
None of the ingredients is listed.
- **California Proposition 65 chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.
- **California Proposition 65 chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.
- **California Proposition 65 chemicals known to cause developmental toxicity:**
None of the ingredients is listed.
- **Cancerogenity categories**
- **EPA (Environmental Protection Agency)**
None of the ingredients is listed.
- **NTP (National Toxicology Program)**
None of the ingredients is listed.
- **MAK (German Maximum Workplace Concentration)**
None of the ingredients is listed.

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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Harmful

· **Hazard-determining components of labelling:**

Aliphatic hydrocarbon

· **Risk phrases:**

Irritating to eyes and respiratory system.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking

Vapours may cause drowsiness and dizziness

· **Safety phrases:**

Keep out of the reach of children.

Keep container tightly closed.

Keep away from sources of ignition - No smoking.

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Dispose of this material and its container at hazardous or special waste collection point

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
Water	36.5
III	2.0

· **Water hazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.

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:** Product safety department

· **Contact:** Product safety department

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)