



| | H | M | I | S |
|----------------|---|---------|---|----------------|
| Hazard Ratings | | | | |
| Minimal | 0 | Serious | 3 | Health 1 |
| Slight | 1 | Severe | 4 | Flammability 1 |
| Moderate | 2 | | | Reactivity 0 |

Material Safety and Data Sheet prepared by W. H. De Boer

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DISTRIBUTOR: Van Son Holland Ink Corporation of America
 185 Oval Drive Islandia, NY 11749
 Emergency Telephone: 631-715-7000
 Product Class: Black Emulsion Ink
 Trade Name: DIGI-INK Black

PARENT COMPANY:
 Van Son Royal Dutch Printing Ink Factories
 Hilversum, Holland

Chemtrec 24 Hour Emergency No-800-424-9300
 Manufacturers Code ID: VL 16RN10/2, VL 17RS10/2,
 VL 17RPHD 10/2, VL 14RS10/2
 VL 13RS 10/2

2. INGREDIENT COMPOSITION INFORMATION

| Ingredient | CAS No. | WT % | OSHA (PEL) | ACGIH (TLM) | Carcinogen |
|----------------------------|------------|------|------------|-------------|------------|
| Mineral Oil | 8012-95-1* | 1.8% | N/A | N/A | No |
| Gas Oils Hydrodesulfurized | 64742-79-6 | 3.4% | N/A | N/A | No |
| Carbon Black | 1333-86-4 | 4.3% | 3.5mg/M3 | 3.5mg/M3 | See 11 |
| Resin | N/A | 3.0% | N/A | N/A | No |
| Surface Active Agent | N/A | | N/A | N/A | No |
| Water | 7732-18-5 | 6.7% | N/A | N/A | No |

3. HAZARDS IDENTIFICATION

OSHA Hazard Communication 29 CFR 1910.1200..... Carbon Black (dry pigment)

4. FIRST AID MEASURES

EFFECTS OF OVEREXPOSURE

Eye Contact Direct contact may cause irritation.
 Skin Contact Prolonged contact or repeated exposure may cause minor irritation.
 Inhalation Excess inhalation of mist or vapor may cause dizziness, nausea or irritation of nasal and respiratory passages.
 Ingestion May cause gastrointestinal irritation.
 Medical Conditions aggravated by normal exposure Persons with dermatitis should avoid skin contact.
 Target Organs Skin, eyes, lungs.
 Primary Routes of entry Eyes, inhalation, dermal.

EMERGENCY FIRST AID PROCEDURES

Eye Contact Flush with large amounts of water until irritation subsides. If irritation persists, contact a physician.
 Skin Contact: Wash with soap and water. Remove contaminated clothing and wash thoroughly before reusing.
 Ingestion If swallowed, do not induce vomiting. Call a physician.
 Inhalation Remove individual to fresh air.

5. FIRE FIGHTING MEASURES

Flash Point Above 360 F Method used: closed cup
 Explosion Limits LEL: N/A UEL: N/A
 Extinguishing Media Foam, dry chemical. Water spray may be applied to cool exposed closed containers.
 Unusual Fire and Explosion Hazards None
 Special Fire Fighting Procedures None

6. ACCIDENTAL RELEASE MEASURES

Procedure when material spilled or released: Wipe up. Dispose of wipes in approved waste containers.
If petroleum hydrocarbon is used, provide sufficient ventilation.
Waste Disposal Method: Dispose of in accordance with Federal, State and Local regulations.

7. HANDLING AND STORAGE

Handling: Avoid storage above 90 F. Keep containers out of direct sunlight.
Other Precautions: None required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | | |
|-------------------------|-----------------------------|-------------------|----------------------|
| Ventilation: | Use sufficient ventilation. | Eye Protection: | Goggles recommended. |
| Protective Gloves: | Gloves recommended. | Other Protection: | None required. |
| Respiratory Protection: | None required. | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|-------------------------------------|----------------------------|--------------------------------------------|
| Volatile Organic Compounds: (VOCs) | 0.8 lbs./gallon | 10 Grams/liter Method 24 |
| Boiling Range °F: | > 212 | Freezing Point °F: 15 F |
| Vapor Density vs. Air: | Heavier | Vapor Pressure: N/A |
| Density: | 7.8 lbs./gallon ASTM D1475 | Specific Gravity: 0.95-1.0 |
| Type of Odor: | Oily | Odor Threshold: N/A |
| Appearance: | Black liquid | pH: N/A |
| Evaporation Rate vs. Butyl Acetate: | Slower | Coefficient of Water/oil Distribution: N/A |
| Percentage Volatile By Weight: | 60-70% ASTM D2369 | |

10. STABILITY AND REACTIVITY

Product Stability Stable
Conditions to Avoid Strong oxidizing agents Avoid storage above 90 F.
Keep containers closed when not in use.
Hazardous Decomposition Products None.
Hazardous Polymerization Will not occur.

11. TOXICOLOGICAL INFORMATION

| | | |
|-----------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Carcinogen | No | OSHA in December 1996 ruled that a printing ink mixture containing carbon black as evaluated by the International Agency for Research on Cancer (IARC) is not classifiable as to their carcinogenicity to humans (Group 3). Carbon Black is not present in such a form so as to present an exposure problem for employees. No materials present are considered carcinogenic by National Toxicology Program (NTP). |
| Mutagen | No | |
| Teratogen | No | |
| Reproductive Toxicity | No | |
| | | |

12. ECOLOGICAL INFORMATION

This product has not been evaluated, but there is no evidence to suggest it will cause any significant environmental problem.

13. DISPOSAL CONSIDERATIONS

Material Released or spilled: This product is not regulated under the Federal Resource Conservation and Recovery Act (RCRA) as a hazardous waste. State and/or local regulations may apply. Spill should be contained, absorbed with suitable absorbent material and placed in suitable containers for disposal in a licensed facility in accordance with local, state and federal laws. Do not discharge into waterways or sewer systems.

14. TRANSPORT INFORMATION DOT (HM 181) : Not required Shipping Labels: None required**15. REGULATORY INFORMATION**

| | |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| TSCA (Toxic Substance Control Act) | All ingredients listed in TSCA Inventory |
| CERCLA Superfund 40CFR 117.302 | Contains no reportable materials |
| SARA Title III | Contains no reportable materials |
| FDA | This printing ink is not a food additive and would not have approval for direct or indirect contact with food. |
| EINECS (European Economic Community) | All ingredients listed. |
| California Proposition 65 | Contains no reportable materials |
| CONEG Legislation | Meets all current State and Heavy Metal limitations. |
| Canadian WHMIS | Non-controlled product |

This information is furnished without warranty, expressed or implied, except that it is accurate to the best of the knowledge of Van Son Holland Ink Corporation of America. The data on this sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The hazards covered are believed to be those most likely to occur in the reasonable or ordinary use of these materials. Van Son Holland Ink Corporation of America assumes no legal responsibility for use or reliance on this data.