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**MATERIAL SAFETY DATA SHEET**

MSDS Ref: MSDS0102  
Valid from: 24/04/02

EMERGENCY NUMBERS  
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**SECTION I - IDENTIFICATION**

**Product Identifier:** SCANTRUE II Ink-Jet Ink

**SECTION II - COMPOSITION**

Description: Pigment-based, liquid ink.

<b>HAZARDOUS COMPONENT</b>	<b>CAS#</b>	<b>% range</b>	<b>OSHA PEL** mg/m3</b>	<b>ACGIH TLV** mg/m3</b>	<b>NIOSH REL** mg/m3</b>	<b>Symbol</b>	<b>R-phrase</b>
Carbon black	1333-86-4	5-20	3.5	3.5	3.5	None	None
High boiling aliphatic Distillate solvent	64742-80-9	5-20	None	None	None	Xn	R22, 43 R36/37/38
Quinol	proprietary	<2	2mg/m3	2mg/m3	2mg/m3	Xn	R20/22
Non-hazardous ingredients	proprietary	60-80	None	None	None	None	None

See section 3: potential health effects. See section 11: available toxicity information. See section 15: regulatory information.

**SECTION III - HAZARD IDENTIFICATION**

**Emergency Overview:** Eye, skin, respiratory irritant. Harmful if swallowed.

**Hazard Ratings:** NFPA Health: 1 Flammability: 1 Reactivity: 0

**POTENTIAL HEALTH AFFECTS**

**Eye Contact:** Contact will cause irritation.

**Skin Contact:** Irritating to the skin.

**Ingestion:** Data Not Available.

**Inhalation:** Data Not Available.

**Chronic:** None

**SECTION IV – EMERGENCY AND FIRST AID MEASURES**

**Eye Contact:** Immediately flush with water. Remove contact lenses. Flush with copious amounts of water for at least 20 minutes. Seek medical advice.

**Skin Contact:** Rinse with water then wash with plenty of soap and water for 15 minutes while removing contaminated clothing. Seek medical advice. Clean contaminated clothing and shoes before reuse.

**Ingestion:** DO NOT INDUCE VOMITING. In any case of persistent irritation, seek medical advice

**Inhalation:** Remove to fresh air. If breathing difficult, give oxygen. If symptoms continue, seek medical advice.  
**In any case of persistent irritation, seek medical advice.**

**SECTION V - FIRE FIGHTING MEASURES**

**Flashpoint and Method:** >104°C Closed Cup

**Flammable Limits:** N/A

**Autoignition Temperature:** N/A

**Extinguishing Media:** Foam, carbon dioxide, dry chemical.

**Special Fire Fighting Procedures:** Self contained breathing apparatus and full turn-out gear. Limit access by unauthorised personnel.

**Unusual Fire and Explosion Hazards:** Water fog may be used to cool containers, but is not recommended as an extinguishing agent, since it may cause boil-over or frothing.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen. Ammonia and unidentified organic compounds.

## SECTION VI - ACCIDENTAL RELEASE MEASURES

**General:** Wear skin, eye and respiratory protection.

**Spill:** Do not reuse empty container. Clean containers thoroughly before disposal.

Spills should be cleaned up using appropriate absorbents. Dispose of waste materials in accordance with applicable local, regional and national regulations.

## SECTION VII - HANDLING AND STORAGE

Store in a cool [4-40°C], dry, well ventilated area in sealed containers. Keep away from children. Wear appropriate protective clothing/equipment when handling this material. Avoid contact with skin, eyes and clothing. Practice good hygiene.

## SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limit:** None are established for the ink. Exposure limits for the individual components are found in Section 2.

**Engineering Controls (ventilation):** General mechanical exhaust is probably adequate under normal use conditions. Airborne concentrations of components having published limits should be measured periodically. If airborne concentrations approach or exceed published exposure limits, use local exhaust.

### PERSONAL PROTECTION:

**Respiratory:** If needed, because airborne concentrations of the regulated components can not be maintained below the published limits, use NIOSH-MSHA approved respirator.

**Eye Protection:** Chemical goggles or safety glasses with side shields are recommended. If risk of splashing is significant, use a full-face shield.

**Skin Protection:** Always use gloves and lab coat. Arm covers and apron of an impervious material are indicated if contamination of arms and clothing seems likely.

**Other:** Eyewash and safety shower must be available nearby.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Black, liquid.

**Flammable Limits:** N/A

**Flashpoint and Method:** est, >104°C

**Autoignition Temperature:** N/A

**Vapour Pressure:** mm Hg <0.004 est.

**Evaporation Rate (n-butyl Acetate=1):** <1

**Specific Gravity:** 1.00

**Percent Volatiles:** est.<80%

**Solubility:** slight

**Boiling Point:** est. 350°F

**pH:** approx. 9.0

**Vapour Density (air = 1):** N/A

**Melting/freezing Point:** <-20°C

**Viscosity:** @25°C 20 cps

## SECTION X - STABILITY AND REACTIVITY

**Stability:** Stable under normal operating conditions

**Hazardous Polymerisation:** Has not been reported.

**Conditions to avoid:** Avoid exposure to high temperatures.

**Incompatibility:** Oxidizing agents (i.e. chlorates, bromates, nitrates), strong acids and alkalis.

### Hazardous Thermal Decomposition

**Products:** Oxides of carbon and nitrogen, Ammonia and other unidentified organic compounds.

## SECTION XI - TOXICOLOGICAL INFORMATION

**Acute Toxicity:** The LD50 (oral, rat) for all components [except quinol] is >2 g/kg. The LD50 [oral, rat] of quinol is 320 mg/kg, however, the concentration of hydroquinone is so low in the ink, that a large quantity of the ink would need to be ingested before the hydroquinone could cause significant toxic effects.

**Subchronic Effects:** None

**Chronic effects/carcinogenicity:** .

**Components Listed As Carcinogens By Regulatory Agencies:** The ink is not listed.

*Component:* Carbon black  
*OSHA:* Not listed      *NIOSH:* not listed      *NTP:* Not listed.      *IARC:* 2B  
Carbon black has been positive in some animal cancer studies and negative in others. There is not enough epidemiological evidence to support classifying carbon black as a human carcinogen. Consequently IARC has rated it as a possible human carcinogen. Carbon blacks contain a very low percentage of absorbed PAH's (poly nuclear aromatic hydrocarbons) which in the non-absorbed form have sometimes been found to be animal carcinogens. The carbon black used in this ink has <0.1% absorbed PAH's.

*Component:* Quinol  
*OSHA:* Not listed      *NIOSH:* Not listed      *IARC:*3

**Mutagenicity:** Not Known

**Reproductive Effects:** None known.

## SECTION XII - ECOLOGICAL INFORMATION

**Ecotoxicological Information:** None known.

**Chemical Fate Information:** None known.

## SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose of according to appropriate local, regional and national regulations.

## SECTION XIV - TRANSPORT INFORMATION

*For Quantities less than 10 kilograms:*

**Ground Transport:** Not regulated

**Air Transport:** Not regulated

**Ocean Transport:** Not regulated

## SECTION XV - REGULATORY INFORMATION

### UNITED STATES

This product does not contain any ozone depleting substances (ODS). Nor were any ODS used in the manufacture of this product.

**CONEG:**The raw materials used to make this product do not contain mercury, lead, cadmium or hexavalent chromium.

**TSCA [Toxic Substances Control Act]:** None

**SARA [Superfund Amendments and Reauthorization Act] Title III:** None

**EPA Hazard Categories for this product are:** None

**CAAA - Components in this product regulated under the Clean Air Act Amendment of 1990:** None

### State Regulations:

*California SCM/QAD:* As defined by this law, the concentration of VOCs in this ink is estimated to be <80%.

*Massachusetts 105CMR670 Right to Know Act:*

Components which could require reporting under this statute are:

*Carbon Black*      CAS # 1333-86-4

*Quinol*      CAS # 123-31-9

*Pennsylvania Right to Know Hazardous Substance List:*

Components of this ink which could require reporting are: None

*New Jersey:*

Components regulated under this law:

*Carbon Black, Quinol.*

### CANADA

**DSL/nDSL:** All components are listed.

**WHMI Classification:** D2B – Materials causing other toxic effects.

### EUROPEAN UNION

**EINECS Status:** All components are listed.

**CLASSIFICATION:** This product is classified as harmful based on criteria found in EU Directives 67/548 and 88/379.

## **SECTION XVI - OTHER INFORMATION**

### **Revision Summary:**

**The information and recommendations contained in this document are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to this information.**