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## Ink Cartridge (C) (B019663-01)

MSDS Number: MSDSB019663-01-04-OT-E--- *Effective Date: 06/04/2009*

### 1. Product Identification

**Product Name:** Ink Cartridge (C) (B019663-01)

**Synonyms:** None

**Use:** Water-Based Printing Ink

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
1,2-Propanediol	57-55-6	5-10	No

### 3. Hazards Identification

NKCL SAFE-RATE Ratings - Provided here for your convenience  
(NORITSU KOKI CO., LTD. utilizes ratings comparable to the HMIS Rating System)

**Health Rating:** 1 - Slight  
**Flammability Rating:** 0 - None  
**Reactivity Rating:** 0 - None  
**PPE:** B – Eye/Hand Hazard  
**Storage Color Code:** Orange – General Storage  
**Potential Health Effects**

**Acute Exposure:** Inhalation, Ingestion, Skin Contact and Eye Contact

**Inhalation:** The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

**Ingestion:** Although ingestion is not thought to produce harmful effects,

the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ(e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

**Skin Contact:** The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

**Eye Contact:** Although the material is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

**Chronic Exposure:** Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course.

**Aggravation of Pre-existing Conditions:** Persons with pre-existing lung disease may be more susceptible to the effects of this material.

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## 4. First Aid Measures

**Inhalation:** If fumes or combustion products are inhaled: Remove to fresh air. Lay patient down. Keep warm and rested. Other measures are usually unnecessary.

**Ingestion:** Rinse mouth out with plenty of water. If irritation or discomfort persists seek medical attention.

**Skin Contact:** If product comes in contact with the skin: Wash affected areas thoroughly with water (and soap if available). Seek medical attention in event of irritation.

**Eye Contact:** If this product comes in contact with eyes: Wash affected area with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**NOTES TO PHYSICIAN:** Treat symptomatically.

## 5. Fire Fighting Measures

**Flash Point (°F):** Not Applicable  
**Lower Explosive Limit (%):** Not Applicable  
**Upper Explosive Limit (%):** Not Applicable  
**Autoignition Temp (°F):** Not Available

**Fire Potential:** Product is not flammable under normal use conditions.

**Explosion Potential:** Product is not explosive under normal use conditions.

**Fire Extinguishing Media:** The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which should be used. Choice of extinguishing media should take into account surrounding areas. Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider: foam, dry chemical powder, carbon dioxide, and/or water spray

**Fire Fighting Measures:** Alert Emergency Responders and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves for fire only. Prevent, by any means available, spillage from entering drains or water course. Use fire fighting procedures suitable for surrounding area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.

**Special Information:** The material is not readily combustible under normal conditions. However, product will breakdown under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. Product decomposes on heating and may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NOX), and sulfur oxides (SOX). Product may emit acrid smoke.

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## 6. Accidental Release Measures

**General Information:** Use proper Personal Protective Equipment as indicated in **Section 8. Exposure Controls/Personal Protection**.

**Spills/Leaks:** Clean up all spills immediately. Absorb with an inert material (eg: vermiculite, sand or earth), then place in suitable container. Remove all ignition sources. Use spark-proof tools. Provide ventilation to spill area. A vapor suppressing foam may be used to suppress vapors.

## 7. Handling and Storage

Keep out of reach of children and do not drink fluid. Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not dismantle cartridge. Do not store cartridges with oxidizing agents or explosives. Make sure cartridge is dry before insertion into printer housing.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:** None Established.

**Ventilation System:** General ventilation under normal use conditions.

**Personal Respirators (NIOSH Approved):** None needed under normal use conditions. NIOSH Approved respirator appropriate for exposures of concern.

**Hand Protection:** Impervious gloves.

**Skin Protection:** Protective clothing.

**Eye Protection:** ANSI Approved Safety Goggles.

**Misc. Safety Equipment:** ANSI Approved Eye Wash Station and Deluge Shower.

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## 9. Physical and Chemical Properties

**Appearance:** Cyan liquid.

**Odor:** Slight.

**Solubility:** Miscible.

**Molecular Weight:** N/A

**pH (1% solution):** N/A

**pH:** 7.5-9.5

**Specific Gravity (water=1):** 1.08

**Lower Explosive Limit:** N/A

**Upper Explosive Limit:** N/A

**Autoignition Temperature:** N/A

**% Volatiles by volume @ 21C (70F):**

**Boiling Point (°F):** 212

**Melting Point:** N/A

**Vapor Density (Air=1):** N/A

**Vapor Pressure (mm Hg):** N/A

**Evaporation Rate (BuAc=1):** N/A

**Flash Point (°F):** N/A

## 10. Stability and Reactivity

**Stability:** Stable under normal use conditions.

**Hazardous Decomposition Products:** Not flammable

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Avoid storage with strong oxidizing agents, peroxide, strong acids and strong alkalis.

**Conditions to Avoid:** Avoid temperatures below -20°C and above 30°C.

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## 11. Toxicological Information

**Toxicological Data:** No Toxicological Data exists for this product.

**Carcinogenicity:**

Ingredient	CAS No	-NTP Carcinogen-		IARC Category
		Known	Anticipated	
1,2-Propanediol	57-55-6	No	No	None

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## 12. Ecological Information

**Environmental Fate:** No information found for this product.

**Environmental Toxicity:** No information found for this product.

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## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. Transport Information

Not Regulated.

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## 15. Regulatory Information

## US Federal Regulations

**A. General Product Information:** In addition to Federal and State regulation, local regulations may apply. Check with your local regulatory authorities.

**B. Component Information:** This material contains no chemicals required that are to be identified under SARA Section 302 (40 CFR 455 Appendix A) SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

## State Regulations

**A. General Product Information:** No component(s) require labeling under California Proposition 65

**B. Component Information:** No components in this product are regulated by any US state regulatory agencies.

## Other Regulations

**A. General Product Information:** Some of this product's components are listed in the European Inventory of New and Existing Chemical Substances (EINECS).

**B. Component Information: CANADA:** No component(s) in this product are identified under the Canadian Hazardous Products Act Ingredient Disclosure List.

**C. Domestic Substances List: CANADA:** Some of this product's components are on the Canadian Domestic Substances List.

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## 16. Other Information

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

**Label Hazard Warning:** None.

**Label Precautions:** Avoid contact with eyes, skin and clothing. Avoid breathing. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

**Label First Aid:** If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

**Revision Information:** Initial MSDS Development.

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### **Disclaimer:**

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**NORITSU KOKI CO., LTD. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.**

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