

# MATERIAL SAFETY DATA SHEET

KCDS-No.

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : TN-03Y toner  
 MFR. REF. : TUFTONE HIY-S1-A  
 MANUFACTURER : Hitachi Taga Electronics Co., Ltd.  
 ADDRESS : 1-1 Higashitaga-cho 1-chome, Hitachi-shi, Ibaraki-ken 316-8502, Japan  
 DIVISION : Printer Design Dept.  
 TELEPHONE NO. : +81-294-36-8754  
 FAX NO. : +81-294-36-8979  
 EMERGENCY TELEPHONE NO.: +81-294-36-8617  
 SUPPLIER : Brother Industries, Ltd.  
 ADDRESS : 1-1-1, Kawagishi, Mizuho-ku, Nagoya 467-8562, Japan  
 TELEPHONE NO. : +81-52-824-2545

[2.COMPOSITION/INFORMATION ON INGREDIENTS]

SUBSTANCE OR PREPARATION : Preparation

INGREDIENTS AND CONCENTRATION RANGE

Ingredients	Concentration Range(%)	CAS RN
Yellow toner		

INGREDIENTS CONTRIBUTING TO : None  
 THE HAZARD(JAPAN)

[3.HAZARDS IDENTIFICATION]

MOST IMPORTANT HAZARDS :  
 ADVERSE HUMAN HEALTH EFFECTS : To the best of our investigation, no special hazards have to be mentioned.  
 ENVIRONMENTAL EFFECTS : To the best of our investigation, no information available.  
 PHYSICAL AND CHEMICAL HAZARDS : This material is not dangerous in case of usual handling. May cause risk of dust explosion.  
 CLASS NAME FOR MSDS IN JAPAN : Not applicable

[4.FIRST-AID MEASURES]

IN CASE OF EYE CONTACT : Immediately hold eyelids open and flush with a stream of water for at least 15 minutes. If necessary seek medical attention.  
 IN CASE OF SKIN CONTACT : Wash material off the skin with plenty of water and soap. If necessary seek medical attention.  
 IN CASE OF INHALATION : Remove person to fresh air. If necessary seek medical attention.  
 IN CASE OF INGESTION : Seek medical attention. Never give anything by mouth to an unconscious person. If possible, rinse out mouth and give one or two glasses of water or milk to drink.

[5.FIRE-FIGHTING MEASURES]

EXTINGUISHING MEDIA : Water spray, powder  
 NOT SUITABLE EXTINGUISHING MEDIA : No information available

- SPECIFIC HAZARDS : May produce irritating or toxic gases in a fire.
- SPECIFIC METHODS : Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible.
- PROTECTION OF FIREFIGHTERS : Use goggles in combination with dust mask, and another protections as appropriate to situation.

## [6. ACCIDENTAL RELEASE MEASURES]

- PERSONAL PRECAUTIONS : Use mask, goggles and protective gloves.  
Large spills : Remove person to safety.  
Ensure adequate ventilation.  
Treat from upwind position.
- ENVIRONMENTAL PRECAUTIONS : Do not discharge into the drains, surface waters or ground water directly.
- METHODS FOR CLEANING UP : Sweep or vacuum spills.  
Prevent dispersion of dust.
- PREVENTION OF SECONDARY HAZARDS : No information available

## [7. HANDLING AND STORAGE]

## HANDLING

- TECHNICAL MEASURES : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- PRECAUTIONS : Avoid inhalation of fine dust .
- SAFE HANDLING ADVICE : Handle in well-ventilated areas.  
Use safety glasses and protective gloves as appropriate to situation.  
Wash hands and face and gargle after handling.  
Prevent generation of dust.

## STORAGE

- STORAGE CONDITIONS : Keep container tightly closed.  
Protect from sun. Store in a well-ventilated room (under 40 C).
- PACKAGING MATERIALS : No information available

## [8. EXPOSURE CONTROLS/PERSONAL PROTECTION]

- ENGINEERING MEASURES : Not required under normal use. In case of large spill, the following measures are suggested.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Use an adequate ventilation.

## LIMIT VALUES

- ACGIH(TLV) : Not established
- OSHA(PEL) : Not established

## PERSONAL PROTECTIVE EQUIPMENT

- RESPIRATORY PROTECTION : Dust respirator
- HAND PROTECTION : Rubber gloves
- EYE PROTECTION : Safety goggles
- SKIN AND BODY PROTECTION : Full-body suit
- HYGIENE MEASURES : No information available

## [9. PHYSICAL AND CHEMICAL PROPERTIES]

## PHYSICAL STATES

FORM : Powder  
COLOUR : Yellow  
ODOUR : Odourless  
pH : Not applicable

## SPECIFIC TEMPERATURES/TEMPERATURE RANGES AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT : No data available  
MELTING POINT : No data available  
DECOMPOSITION TEMPERATURE : No data available  
FLASH POINT : Not applicable  
AUTOIGNITION TEMPERATURE : No data available

## EXPLOSION PROPERTIES

EXPLOSION : UPPER LIMIT : No data available LOWER LIMIT : No data available

VAPOUR PRESSURE : No data available

VAPOUR DENSITY : No data available

DENSITY : 1.2 g/mL ( 20 °C ) ( 68 °F )

## SOLUBILITY

WATER SOLUBILITY : Insoluble

SOLVENT SOLUBILITY : Partially soluble in toluene, chloroform and tetrahydrofuran.

OCTANOL/WATER PARTITION COEFFICIENT : No data available

OTHER DATA : No data available

## [10. STABILITY AND REACTIVITY]

STABILITY : Stable in general.

HAZARDOUS REACTIONS : Stable.

CONDITIONS TO AVOID : No information available

MATERIALS TO AVOID : No information available

HAZARDOUS DECOMPOSITION PRODUCTS : No information available

OTHERS : No information available

## [11. TOXICOLOGICAL INFORMATION]

ACUTE TOXICITY : Oral, rat, LD50 : > 2000 mg/kg (male, female) (Data on similar product)

## LOCAL EFFECTS

CORROSIVITY : No information available

SKIN IRRITATION : No information available

EYE IRRITATION : No information available

SENSITIZATION : Guinea pig, Guinea Pig Maximization Test : Negative  
(Data on similar product)

CHRONIC TOXICITY/LONG TERM TOXICITY : No information available

CARCINOGENICITY : No information available

IARC : Not established

NTP : Not established

OSHA : Not established

MUTAGENICITY : Ames test (Salmonella typhimurium TA98,TA100,TA1535,TA1537, TA1538 Escherichia coli WP2uvrA) : Negative  
(Data on similar product)

TERATOGENICITY : No information available

REPRODUCTION TOXICITY : No information available

OTHER DATA : No information available

[12.ECOLOGICAL INFORMATION]

MOBILITY : No information available

PERSISTENCE/ DEGRADABILITY : No information available

BIOACCUMULATION : No information available

ECOTOXICITY

AQUATIC TOXICITY : No information available

OTHER DATA : No information available

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE (Section 7)".  
Passed to a licensed waste contractor.

Dispose of waste in accordance with local, state and federal regulations.

[14.TRANSPORT INFORMATION]

Follow all regulations in your country or region

UN CLASS/UN NUMBER : Not applicable

PRECAUTIONS : Review "ACCIDENTAL RELEASE MEASURES (Section 6)".  
Review "HANDLING AND STORAGE (Section 7)".  
Ensure containers without breakage or leakage.  
Ensure containers tightly fixed.  
Follow all regulations in your country or region.

[15.REGULATORY INFORMATION]

INVENTORIES : ENCS(Japan) Yes  
TSCA(USA) All components are listed in TSCA inventory.  
EINECS(EU) All components are listed in EINECS or ELINCS inventory.

[16.OTHER INFORMATION]  
REFERENCE

- Safety data sheet for chemical products - Part 1: Content and order of sections(ISO 11014-1)
- International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist.