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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: TUFTONE YS-4-2  
COMPANY: Samsung Electronics Company  
416, Maetan-3Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea 443-742  
TELEPHONE NO.: 82-31-200-8311  
EMERGENCY TELEPHONE NO.: 82-31-200-8311

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS]

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SUBSTANCE / MIXTURE	: Mixture
CHEMICAL NAME (GENERIC NAME)	: Black Toner
CHEMICAL FORMULA	: Not specified
CAS RN	: Confidential
UN No.	: Not applicable
EINECS	: No(ELINCS)
TSCA	: Yes
OTHER INFORMATION	: Contains: Silica dioxide about 2% . Carbon Black about 4%

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## 3. HAZARDS IDENTIFICATION

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FIRE AND EXPLOSION HAZARD	: May cause risk of dust explosion.
POTENTIAL HEALTH EFFECTS	: To the best of our investigation, No special hazards have to be
ENVIRONMENTAL EFFECTS	: To the best of our investigation, No special hazards have to be

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## 4. FIRST-AID MEASURES]

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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.

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## 5. FIRE-FIGHTING MEASURES

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EXTINGUISHING MEASURES	: Risk of producing harmful gases such as carbon monoxide and Nitrogen oxides. Avoid inhalation of smoke or gases.
EXTINGUISHING AGENTS	: In case of small fire use powder, carbon dioxide In case of large fire shut off air by spraying with water or foam.

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## 6. ACCIDENTAL RELEASE MEASURES

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: In case of spill vacuum material immediately. Then wipe up remainder in waste cloth.

## 7. HANDLING AND STORAGE

HANDLING	: Fight fire from upwind position. Avoid inhalation of dust. Prevent generation of dust Avoid inhalation of fine dust.
STORAGE	: Protect from sun. Store in a cool room. (under 40 C)

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ACGIH(TLV)	: Not established
OSHA(PEL)	: Not established
VENTILATION	: Use local exhaust ventilation or general ventilation
PROTECTIVE MEASURES	
RESPIRATORY PROTECTIVE EQUIPMENTS	: Dust respirator
EYE PROTECTIVE EQUIPMENTS	: Safety goggles
HAND PROTECTIVE EQUIPMENTS	: Rubber gloves
PROTECTIVE CLOTHINGS	: Use as appropriate to situation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	: Black powder
ODOUR	: Odourless
BOILING POINT	: No data available
VAPOUR PRESSURE	: No data available
VAPOUR DENSITY	: No data available
VOLATILITY	: No data available
MELTING / FREEZING POINT	: No data available
SPECIFIC GRAVITY	: 1.2 ( 20.0°C)
SOLUBILITY	
WATER SOLUBILITY	: No data available
SOLVENT SOLUBILITY	: A part of component is soluble in toluene, chloroform and tetrahydrofuran
pH	: No data available
VISCOSITY	: No data available
OCTANOL / WATER	: No data available
PARTITION COEFFICIENT	
OTHER INFORMATION	: None

## 10. REACTIVITY AND STABILITY

FLASH POINT	: Not applicable
AUTOIGNITION TEMPERATURE	: No data available
EXPLOSIVE LIMIT IN AIR(LEC)	: No data available
EXPLOSIVE LIMIT IN AIR(UEC)	: No data available
COMBUSTIBILITY	: Yes
OXIDIZABILITY	: No
SELF-REACTIVITY / EXPLOSIVITY	: This material may cause risk of dust explosion.
REACTIVITY AND STABILITY	: Stable in general
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS	: No data available
OTHER INFORMATION	: None

## 11. TOXICOLOGICAL INFORMATION

CORROSIVITY	: No data available
SKIN IRRITATION	: No data available
EYE IRRITATION	: No data available
SENSITIZATION	: No data available
ACUTE TOXICITY	: No data available
SUBCHRONIC EFFECTS	: No data available
CHRONIC EFFECTS	: No data available
CARCINOGENICITY	: No data available
IARC	: Group 3. The agent is not classifiable as to its carcinogenicity to humans. (Silica) Group 2B. The agent is possibly carcinogenic to humans. (Carbon)
NTP	: None of this product's components are listed
OSHA	: None of this product's components are listed
MUTAGENICITY	: No data available
REPRODUCTIVE EFFECTS	: No data available
TERATOGENICITY	: No data available
OTHER INFORMATION	: None

## 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY	: No data available
BIOACCUMULATION	: No data available
FISH TOXICITY	: No data available
OTHER INFORMATION	: None

## 13. DISPOSAL CONSIDERATIONS

Review "HANDLING AND STORAGE(Section7)"  
 Dispose of waste in accordance with local, state and federal regulations.  
 Passed to a licensed waste contractor.  
 Incinerate with little portions.  
 Risk of producing harmful gases such as carbon monoxide and nitrogen oxides.

## 14. TRANSPORTATION INFORMATION

PRECAUTIONS	Follow all regulations in your country or region. : Review "ACCIDENTAL RELEASE MEASURES(Section6)" Review "HANDLING AND STORAGE(Section7)" Handle container carefully to avoid shock. Do not fall or crash Keep dry
PROPER SHIPPING NAME	: Non hazardous
HAZARD CLASS	: Not applicable
UN NO.	: Not applicable
PACKING GROUP	: Not applicable
HAZARD LABELS	: Not applicable

## 15. REGULATORY INFORMATION

Follow all regulations in your country or region.  
 EINECS : No (ELINCS)  
 TSCA : Yes  
 KAO Corporation is not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

## 16. OTHER INFORMATION

REFERENCES : None

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.

