



Oki, Network Solutions

for a Global Society

Material Safety Data Sheet

Toner Powder:

ODY-5 / ODM / ODC / ODK-5

For: C7400 / C7200 Series

Oki Data Corporation
Strategic Planning Office

SAFETY DATA SHEET

Conforms to 91/155/EEC - 2001/58/EC

TUFTONE ODY-5

1. Identification of the substance/preparation and of the company/undertaking

Product name : TUFTONE ODY-5
Code : KJ10036801 (1.03)
Chemical product name : Yellow Toner
Supplier : Oki (Europe) Ltd.
3 Castlecary Road, Wardpark North Industrial Estate
Cumbernauld, Scotland, G68 0DA

Emergency telephone number : +44 (0) 1238 502502

Material Uses : For electrophotographic printing systems

2. Composition / information on ingredients

Substance/Preparation : Preparation

Chemical name*	%	EC Number	Classification
BIS(3,5-DI-TERT-BUTYLSALICYLATO-O1,O2)ZINC	0.25-2.5	EL INCS.	F: R11 Xn: R22 N: R50/53
See Section 16 for the full text of the R Phrases declared above			

* Occupational Exposure Limit(s), if available, are listed in section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1988/45/EC and its amendments.

Classification : R52/53

Skin Contact : Sensitization of the product: Not available.
Non-irritant for skin.

Aggravating conditions : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Skin Contact : Wash with soap and water. Get medical attention if irritation develops.

Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

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5. Fire-fighting measures

Extinguishing Media

- Suitable** : SMALL FIRE: Use DRY chemical powder.
 : LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- Hazardous thermal (de)composition products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).
- Special fire-fighting procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental Precautions and Clean-up Methods** : Use a shovel to put the material into a convenient waste disposal container. **Neutralize the residue with a dilute solution of sodium carbonate.** Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
- Occupational Exposure Limits** : Not available.
- Recommended monitoring procedures** :
- Personal protective equipment**
- Skin and body** : Lab coat.
- Eyes** : Safety glasses.

9. Physical and chemical properties

- Physical state** : Solid. (Powdered solid.)
- Color** : Yellow. (Dark.)
- Odor** : Odorless.
- pH** : Not applicable.
- Flash point** : Closed cup: >150°C (302°F).
- Autoignition temperature** : Not available.
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available.
 Explosive in presence of open flames, sparks and static discharge.
- Oxidizing Properties** : Not available.
- Vapor Pressure** : Not available.
- Density** : 1.2 g/cm³
- Solubility** : Partially soluble in methanol.
 Insoluble in cold water.

10. Stability and reactivity

Stability : The product is stable.
Hazardous Decomposition Products : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

11. Toxicological information

Acute toxicity

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Yellow Toner	LD50	>2000 mg/kg	Oral	Rat

Local effects

Skin irritation : Non-irritant for skin.
Chronic toxicity : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Other Information : Not available.

Specific effects

Mutagenic Effects : Non-mutagenic for bacteria and/or yeast. [Yellow Toner].
Developmental and Teratogenic Effects : Not available.

12. Ecological information

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Classification : Not applicable.
European Waste Catalogue (EWC) : Not available.
Hazardous Waste : The classification of the product may meet the criteria for a hazardous waste

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

15. Regulatory information

EU Regulations

Risk Phrases : R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases : S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.
Product Use : Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.
 - Industrial applications.

Germany

Hazard class for water : 2

16. Other information

Full text of R-Phrases with no. appearing in Section 2 - Europe : R11- Highly flammable.
R22- Harmful if swallowed.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Text of classifications appearing in Section 2 - Europe : F - Highly flammable
Xn - Harmful
N - Dangerous for the environment.

HISTORY

Product Code : KJ10036601
Date of printing : 17/12/2002
Date of issue : 16/12/2002
Date of Previous Issue : No Previous Validation
Version : 1.03
Form : KCJ - SDS EU Contextual V3.1.3 2nd ATP - Europe

Notice to Reader

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SAFETY DATA SHEET

Conforms to 91/155/EEC - 2001/58/EC

TUFTONE ODM

1. Identification of the substance/preparation and of the company/undertaking

Product name : TUFTONE ODM
Chemical product name : Magenta toner
Supplier : Oki (Europe) Ltd.
3 Castlecary Road, Wardpark North Industrial Estate
Cumbernauld, Scotland, G68 0DA

Emergency telephone number : +44 (0) 1236 502502

Material Uses : For electrophotographic printing systems

2. Composition / information on ingredients

Substance/Preparation : Preparation

Chemical name*	%	EC Number	Classification
BIS(3,5-DI-TERT-BUTYLSALICYLATO-O1,O2)ZINC	0.25-2.5	ELINCS.	F; R11 Xn; R22 N; R50/53
See Section 16 for the full text of the R Phrases declared above			

* Occupational Exposure Limit(s), if available, are listed in section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R52/53
Skin Contact : Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.

Aggravating conditions : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Skin Contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

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5. Fire-fighting measures

Extinguishing Media

- Suitable** : SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- Hazardous thermal (de)composition products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).
- Special fire-fighting procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental Precautions and Clean-up Methods** : Use a shovel to put the material into a convenient waste disposal container. **Neutralize the residue with a dilute solution of sodium carbonate.** Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
- Occupational Exposure Limits** : Not available.
- Recommended monitoring procedures** :
- Personal protective equipment**
- Skin and body** : Lab coat.
- Eyes** : Safety glasses.

9. Physical and chemical properties

- Physical state** : Solid. (Powder.)
- Color** : Red.
- Odor** : Odorless.
- pH** : Not applicable.
- Melting Point** : 105 to 115°C (221 to 239°F)
- Flash point** : Closed cup: >150°C (302°F).
- Autoignition temperature** : Not available.
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available.
Explosive in presence of open flames, sparks and static discharge.
- Oxidizing Properties** : Not available.
- Vapor Pressure** : Not available.
- Density** : 1.2 g/cm³ (20°C / 68°F)
- Solubility** : Insoluble in cold water.

10. Stability and reactivity

Stability : The product is stable.
Hazardous Decomposition Products : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

11. Toxicological information

Acute toxicity

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Magenta toner	LD50	>2000 mg/kg	Oral	Rat

Local effects

Chronic toxicity : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Other Information : Not available.

Specific effects

Mutagenic Effects : Non-mutagenic for bacteria and/or yeast. [Magenta toner]. OECD 471
Developmental and Teratogenic Effects : Not available.

12. Ecological information

Persistence/degradability : **Biodegradability:**
No evidence of biodegradability.

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Classification : Not applicable.
European Waste Catalogue (EWC) : Not available.
Hazardous Waste : The classification of the product may meet the criteria for a hazardous waste

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

15. Regulatory information

EU Regulations

Risk Phrases : R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases : S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.
Product Use : Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.
- Industrial applications.

Germany

Hazard class for water : 2

16. Other information

Full text of R-Phrases with no. appearing in Section 2 - Europe : R11- Highly flammable.
R22- Harmful if swallowed.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Text of classifications appearing in Section 2 - Europe : F - Highly flammable
Xn - Harmful
N - Dangerous for the environment.

HISTORY

Product Code : KJ551405 H
Date of printing : 02/12/2002
Date of issue : 29/11/2002
Date of Previous Issue : No Previous Validation
Version : 1.03
Form : KCJ - SDS EU Contextual V3.1.3 2nd ATP - Europe

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SAFETY DATA SHEET

Conforms to 91/155/EEC - 2001/58/EC

TUFTONE ODC

1. Identification of the substance/preparation and of the company/undertaking

Product name : TUFTONE ODC
Chemical product name : Cyan Toner
Supplier : Oki (Europe) Ltd.
3 Castlecary Road, Wardpark North Industrial Estate
Cumbernauld, Scotland, G68 0DA

Emergency telephone number : +44 (0) 1236 502502

Material Uses : For electrophotographic printing systems

2. Composition / information on ingredients

Substance/Preparation : Preparation

Chemical name*	%	EC Number	Classification
COPPER, [29H,31H-PHTHALOCYANINATO(2-)-N29,N30,N31,N32]-, (SP-4-1)- BIS(3,5-DI-TERT-BUTYLSALICYLATO-O1,O2)ZINC	2.5-5 0.25-2.5	205-685-1 ELINCS.	 F; R11 Xn; R22 N; R50/53
See Section 16 for the full text of the R-Phrases declared above			

* Occupational Exposure Limit(s), if available, are listed in section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R52/53
Skin Contact : Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.

Aggravating conditions : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Skin Contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

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Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

5. Fire-fighting measures

Extinguishing Media

- Suitable** : SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- Hazardous thermal (de)composition products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.
- Special fire-fighting procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental Precautions and Clean-up Methods** : Use a shovel to put the material into a convenient waste disposal container. **Neutralize the residue with a dilute solution of sodium carbonate.** Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
- Occupational Exposure Limits** : Not available.

COPPER, [29H,31H-PHTHALOCYANINATO(2-)-N29,N30, (SP-4-1)- **MAK-Werte Liste (Germany, 2000).**
Spitzenbegrenzung: 2 mg/m³ 4 times per shift, 30 minute(s). Form: Inhalable fraction
TWA: 1 mg/m³ 8 hour(s). Form: Inhalable fraction

Recommended monitoring procedures :

Personal protective equipment

- Skin and body** : Lab coat.
- Eyes** : Safety glasses.

9. Physical and chemical properties

- Physical state** : Solid. (Powder.)
- Color** : Blue.
- Odor** : Odorless.
- pH** : Not applicable.
- Melting Point** : 105 to 115°C (221 to 239°F)
- Flash point** : Closed cup: >150°C (302°F).
- Autoignition temperature** : Not available.
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available.
Explosive in presence of open flames, sparks and static discharge.
- Oxidizing Properties** : Not available.
- Vapor Pressure** : Not available.

TUFTONE ODC

Density : 1.2 g/cm³ (20°C / 68°F)
Solubility : Insoluble in cold water.

10. Stability and reactivity

Stability : The product is stable.
Hazardous Decomposition Products : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.

11. Toxicological information

Acute toxicity

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Cyan Toner	LD50	>2000 mg/kg	Oral	Rat

Local effects

Chronic toxicity : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Other Information : Not available.

Specific effects

Mutagenic Effects : Non-mutagenic for bacteria and/or yeast. [Cyan Toner]. OECD 471
Developmental and Teratogenic Effects : Not available.

12. Ecological information

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Classification : Not applicable.

European Waste Catalogue (EWC) : Not available.

Hazardous Waste : The classification of the product may meet the criteria for a hazardous waste

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

15. Regulatory information

EU Regulations

- Risk Phrases** : R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety Phrases** : S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.
- Product Use** : Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.
- Industrial applications.

Germany

- Hazard class for water** : 2

16. Other information

- Full text of R-Phrases with no. appearing in Section 2 - Europe** : R11- Highly flammable.
R22- Harmful if swallowed.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Text of classifications appearing in Section 2 - Europe** : F - Highly flammable
Xn - Harmful
N - Dangerous for the environment.

HISTORY

- Product Code** : KJ551304 H
- Date of printing** : 02/12/2002
- Date of issue** : 29/11/2002
- Date of Previous Issue** : No Previous Validation
- Version** : 1.03
- Form** : KCJ - SDS EU Contextual V3.1.3 2nd ATP - Europe

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SAFETY DATA SHEET

Conforms to 91/155/EEC - 2001/58/EC

TUFTONE ODK-5

1. Identification of the substance/preparation and of the company/undertaking

Product name : TUFTONE ODK-5
Code : KJ10037001 (1.03)
Chemical product name : Black toner
Supplier : Oki (Europe) Ltd.
3 Castlecary Road, Wardpark North Industrial Estate
Cumbernauld, Scotland, G68 0DA

Emergency telephone number : +44 (0) 1236 502502

Material Uses : For electrophotographic printing systems

2. Composition / information on ingredients

Substance/Preparation : Preparation

Chemical name*	%	EC Number	Classification
BIS(3,5-DI-TERT-BUTYLSALICYLATO-O1,O2)ZINC	0.25-2.5	ELINCS.	F; R11 Xn; R22 N; R50/53
See Section 16 for the full text of the R Phrases declared above			

* Occupational Exposure Limit(s), if available, are listed in section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R52/53
Skin Contact : Sensitization of the product: Not available.
Non-irritant for skin.
Aggravating conditions : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Skin Contact : Wash with soap and water. Get medical attention if irritation develops.
Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Date of issue : 16/12/2002

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5. Fire-fighting measures

Extinguishing Media

- Suitable** : SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- Hazardous thermal (de)composition products** : These products are carbon oxides (CO, CO₂).
- Special fire-fighting procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental Precautions and Clean-up Methods** : Use a shovel to put the material into a convenient waste disposal container. **Neutralize the residue with a dilute solution of sodium carbonate.** Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
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Recommended monitoring procedures :

Personal protective equipment

- Respiratory system** : Wear appropriate respirator when ventilation is inadequate.
- Skin and body** : Lab coat.
- Eyes** : Safety glasses.

9. Physical and chemical properties

- Physical state** : Solid. (Powdered solid.)
- Color** : Black. (Dark.)
- Odor** : Odorless.
- pH** : Not applicable.
- Melting Point** : 105 to 115°C (221 to 239°F)
- Flash point** : Closed cup: >150°C (302°F).
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available. Explosive in presence of open flames, sparks and static discharge.
- Oxidizing Properties** : Not available.
- Density** : 1.2 g/cm³
- Solubility** : Partially soluble in methanol.
Insoluble in cold water.

10. Stability and reactivity

Stability : The product is stable.
Hazardous Decomposition Products : These products are carbon oxides (CO, CO₂).

11. Toxicological information

Acute toxicity

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Black toner	LD50	>2000 mg/kg	Oral	Rat
Carbon black	LD50	>2000 mg/kg	Oral	Rat

Local effects

Skin irritation : Non-irritant for skin.

Chronic toxicity : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Other Information : Not available.

Specific effects

Mutagenic Effects : Non-mutagenic for bacteria and/or yeast. [Black toner].

Developmental and Teratogenic Effects : Not available.

12. Ecological information

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Classification : Not applicable.
European Waste Catalogue (EWC) : Not available.
Hazardous Waste : The classification of the product may meet the criteria for a hazardous waste

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

15. Regulatory information

EU Regulations

Risk Phrases : R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases : S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.
Product Use : Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.
 - Industrial applications.

Germany

Hazard class for water : 2

16. Other information

Full text of R-Phrases with no. appearing in Section 2 - Europe : R11- Highly flammable.
R22- Harmful if swallowed.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Text of classifications appearing in Section 2 - Europe : F - Highly flammable
Xn - Harmful
N - Dangerous for the environment.

HISTORY

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Date of Previous Issue : No Previous Validation
Version : 1.03
Form : KCJ - SDS EU Contextual V3.1.3 2nd ATP - Europe

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