

**SAFETY DATA SHEET**

SDS# EU1014 Revision 1 Date of the revision: November, 2007

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****1.1 Identification of the preparation**

UT-1922 Toner (ET-220 toner)

**1.2 Use of the preparation**

This preparation is a toner used in printers/copiers.

**1.3 Company/undertaking information****Manufacturer**

Name: Mitsubishi Kagaku Imaging Corporation  
Address: 401 Volvo Parkway, Chesapeake, VA 23320, USA  
Phone: +1-757-382-5700  
Email address: MKIC-SDS@m-chem.com

**Responsible company in European Union**

Name: Delacamp AG  
Address: Bargkoppelweg 64, D-22145 Hamburg, Germany  
Phone: +49-(0)40 32 58 28-0

**1.4 Emergency telephone**

Chemtrec +1-800-424-9300 (available 24 hours)

**2. HAZARDS IDENTIFICATION**

This preparation is not classified as dangerous according to the latest adaptations of EU Directive 1999/45/EC or 67/548/EEC.

**Acute health effects**

**Eye contact:** Irritation may occur by mechanical abrasion.  
**Skin contact:** Minimal skin irritation may occur.  
**Inhalation:** Slight irritation of respiratory tract may occur with exposure to large amount of toner dust.  
**Ingestion:** Ingestion is an unlikely route of entry under normal conditions of use.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient	% in mixture	Classification*	EC (ELINCS) number	CAS number
Ammonium bis(1-(3,5-dinitro-2-oxidophenylazo)-3-(N-phenylcarbamoyl)-2-naphtholato)chromate(1-)	0.5-2	F;R11 N; R50/53	400-110-2	109125-51-1

\* Classification according to EU Directive 67/548/EEC

Refer to Section 16 for the wording of the symbols and risk phrases.

This preparation contains no other substance 1 percent or greater, which presents a health or environmental hazard within the meaning of EU Directive 67/548/EEC or is assigned Community workplace exposure limits.

This preparation does not contain a substance 0.1 percent or greater, which is persistent, bioaccumulative, and toxic or very persistent and very bioaccumulative in accordance with the criteria set out in Annex VIII of EU Regulation (EC) No 1907/2006.

The following general description of other components and their concentrations are provided to help recipients understand this preparation.

Ingredients	% in mixture	Classification*	Registered in EINECS/ELINCS
Styrene acrylate copolymer	40-60	Not classified	Yes**
Iron oxide	35-55	Not classified	Yes
Amorphous silica	< 5	Not classified	Yes

\* Classification according to EU Directive 67/548/EEC

\*\* This polymer is regarded as registered because the monomers ( $\geq 2\%$ ) are in EINECS.

#### 4. FIRST AID MEASURES

Immediate medical attention may be required in the unlikely event of extreme inhalation, eye contact or unusual reaction due to physical idiosyncrasy of the person.

**Eye Contact:**

Do not rub eyes. Immediately rinse with plenty of clean running water until particles are washed out. If irritation persists, seek medical advice.

**Skin Contact:**

Wash out particles with plenty of water and soap. If irritation develops, seek medical advice.

**Inhalation:**

Provide fresh air immediately. If symptoms occur, seek medical advice.

**Ingestion:**

Clean mouth out with water. Drink several glasses of water.

If sickness develops, seek medical advice.

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

Carbon dioxide, Water, foam, dry chemical

**Extinguishing media which shall not be used:**

None known.

**Special exposure hazards arising from the preparation itself, combustion products, or resulting gases:**

Toner, like most organic powders, is capable of creating a dust explosion when particles are dispersed.

Carbon monoxide and carbon dioxide are hazardous resulting gases.

**Special protective equipment for fire-fighters:**

None known.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Avoid dust formation. Do not breathe dust.

Wear personal protective equipment as described in Section 8.

**Environmental precautions:**

Do not discharge into drains.

**Methods for cleaning up:**

Eliminate sources of ignition and flammables. Vacuum or sweep the material into a sealed container. If a vacuum cleaner is used, it must be dust explosion-proof. Dispose of the material in accordance with EU/national/regional/local requirements.

#### 7. HANDLING AND STORAGE

##### 7.1 Handling

Keep out of reach of children.

Avoid dust formation. Handle in adequately ventilated area.

Do not breathe dust. Do not get in eyes or on skin.

Keep away from excessive heat and sources of ignition such as sparks and open flames.

Ensure all the equipment is electrically earthed/grounded before beginning operation.

##### 7.2 Storage

Keep out of the reach of children.

Keep container closed and store at room temperature.

Keep away from excessive heat and sources of ignition.

Do not store with strong oxidizers.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Exposure limit values

Preparation as particulate not otherwise classified

ACGIH TLV (TWA): 10 mg/m<sup>3</sup> (Inhalable particulate), 3 mg/m<sup>3</sup> (Respirable particulate)

### 8.2 Exposure controls

#### 8.2.1 Occupational exposure controls

Good general ventilation should be sufficient under normal conditions of use.

Gloves are recommended.

Protective goggles or safety glasses are recommended.

Personal respiratory mask is not required under normal conditions of use, but a respirator is needed in case of dust formation.

#### 8.2.2 Environmental exposure controls

Not applicable.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 General information

**Appearance:**

Fine black powder

**Odor:**

None or slight plastic-like odor

### 9.2 Important health, safety and environmental information

**pH:**

Not applicable.

**Boiling point/boiling range:**

Not applicable.

**Flash point:**

Not applicable.

**Flammability:**

Not flammable.

**Explosive properties:**

No data available.

**Oxidizing properties:**

No data available.

**Vapor pressure:**

Not applicable.

**Relative density:**

1.5-2.5 (water = 1)

**Solubility:**

Partially soluble in toluene and tetrahydrofuran.

**Water solubility:**

Negligible.

**Partition coefficient (n-octanol/water):**

Not applicable.

**Viscosity:**

Not applicable.

**Vapor density:**

Not applicable.

**Evaporation rate:**

Not applicable.

### 9.3 Other information

None

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## 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use and storage.

No hazardous polymerization will occur.

No significant reaction will occur with air or water at room temperature.

### 10.1 Condition to avoid

Excessive heat

Dust formation

### 10.2 Materials to avoid

Strong oxidizers, which could vigorously oxidize organic materials in this preparation and cause a fire in an extreme case.

### 10.3 Hazardous decomposition products

Carbon monoxide and carbon dioxide when combusted.

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## 11. TOXICOLOGICAL INFORMATION

According to our test results of this or similar preparation and the information about the substances contained in this preparation, seriously damaging effect is not expected when this preparation is treated in accordance with standard industrial practices and EU/national/regional/local requirements. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

### Acute toxicity

**Oral:** LD50 rat > 2,500 mg/kg (OECD 425), not harmful. (a similar product)

**Inhalation:** No test data available.

None of the substances in this preparation is classified for acute inhalation toxicity according to EU Directive 67/548/EEC.

**Dermal:** No test data available.

None of the substances in this preparation is classified for acute dermal toxicity according to EU Directive 67/548/EEC.

**Eye irritation:** No test data available.

None of the substances in this preparation is classified as eye irritant according to EU Directive 67/548/EEC.

**Skin irritation:** No test data available.

None of the substances in this preparation is classified as skin irritant according to EU Directive 67/548/EEC.

**Sensitization:** No test data available.

None of the substances in this preparation is classified as a sensitizer according to EU Directive 67/548/EEC.

### Chronic Toxicity

No test data available.

None of the substances in this preparation is classified for chronic toxicity according to EU Directive 67/548/EEC.

**Mutagenicity:** Ames test (Salmonella typhimurium, Escherichia coli) negative (a similar product)

### Carcinogenicity:

No test data available.

None of the substances in this preparation is a known or suspected carcinogen according to IARC Monographs, EU Directives, or OSHA Regulations (USA).

### Reproductive toxicity:

No test data available.

None of the substances in this preparation is classified for reproductive toxicity according to EU Directive 67/548/EEC.

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## 12. ECOLOGICAL INFORMATION

According to our test results of this or similar preparation and the information provided by the suppliers about the substances contained in this preparation, this preparation is not expected to be harmful to ecology.

### 12.1 Ecotoxicity

#### Acute toxicity to aquatic organisms

72-hour IC50 (for algae, *Pseudokirchneriella subcapitata*, OECD 201) > 1,000 mg/L (a similar product)

48-hour EC50 (for *Daphnia magna*, OECD 202) > 1,000 mg/L (a similar product)

96-hour LC50 (for fish, Rainbow trout, OECD 203) > 1,000 mg/L (a similar product)

### 12.2 Mobility

No data available.

### 12.3 Persistence and degradability

No data available.

### 12.4 Bioaccumulative potential

No data available.

### 12.5 Results of PBT assessment

Not applicable.

### 12.6 Other adverse effects

None known.

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**13. DISPOSAL CONSIDERATIONS**

This preparation may be landfilled or incinerated in compliance with all EU/national/regional/local provisions. Do not dump this product into sewers, on the ground, or into any body of water.

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**14. TRANSPORT INFORMATION****International Transport Information**

Not regulated as dangerous goods by IMDG, ADR, RID, or ICAO/IATA.

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**15. REGULATORY INFORMATION**

All the substances in this preparation is listed or exempted in EINECS or ELINCS, and in TSCA. EU classification and labeling in accordance with EU Directives 1999/45/EC and 67/548/EEC:

**Symbol:** None

**Risk phrase:** None

Please refer to any other EU/national/regional/local measures that may be relevant.

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**16. OTHER INFORMATION**

EU Directives 1999/45/EC and 67/548/EEC, EU Regulation (EC) No 1907/2006 mean their latest adaptations in this safety data sheet.

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This document was prepared to satisfy the requirements in EU and may not meet regulatory requirements in other countries.

Wording of the symbols and risk phrases

F: highly flammable

R11: highly flammable

N: dangerous for the environment

R50/53: very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route (The European agreement on cross-border transportation of dangerous goods by road )
CAS	Chemical Abstracts Service
EC50	50 % Effective Concentration
EINECS	European Inventory of Existing Commercial Substances
ELINCS	European List of Notified Chemical Substances
EU	European Union
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IC50	50 % Inhibition Concentration
ICAO	International Civil Aviation Organization
IMDG	International Medical Guide for Ships
LC50	Lethal Concentration, 50 % kill
LD50	Lethal Dose, 50 % kill
OSHA	Occupational Safety and Health Administration
RID	Règlement International concernant le transport des marchandises Dangereuses par chemin de fer (the international regulations covering transportation of dangerous goods by rail)
TLV	Threshold Limit Value
TWA	Time Weighted Average