

# Material Safety Data Sheet

According to 91/155/EEC and following modifications

Issue date: 18/03/03 update: 06/04/05

Data sheet B0436in Rev. n. 1

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

**Product name:** IM.UNIT YELLOW MF 20  
**Code number:** B0436  
**Product description:** Yellow developer used to convey yellow toner to the print drum for electrophotographic printing systems.  
**Company name:** Olivetti S.p.A.  
Via Jervis 77  
10015 Ivrea (TO) - ITALY  
**For information:** Tel. 0039 (0)125 522710  
Fax 0039 (0)125 522711  
e-mail : [supplies@olivettitecnost.com](mailto:supplies@olivettitecnost.com)  
**For emergency:** Centro Antiveleni-Ospedale Niguarda (Milano)  
0039 (0)2 66101029

## 2. Composition / information on ingredients

Substance/ preparation: preparation

Chemical name*	% weight	CAS number	EINECS number	EU classification
Styrene-acrylic resin	1-10	Confidential**	-	Not listed
Acryl resin	1-10	Confidential**	-	Not listed
Iron oxide	40-50	1309-37-1	215-168-2	Not listed
Magnesium oxide	30-40	1309-48-4	215-171-9	Not listed
Manganese oxide	1-10	1344-43-0	215-695-8	Not listed

See section 16 for the full text of the R phases declared above

\*Occupational Exposure Limit(s), is available, are listed in section 8.

\*\*Supplier's confidential information.

## 3. Hazards identification

The preparation has not been classified as a dangerous according to directive 1999/45/EC.

**Skin contact:** Unlikely to cause skin irritation.  
**Ingestion:** Ingestion is not applicable route of entry for intended use.  
**Inhalation:** Prolonged inhalation of excessive dusts may cause lung damage.  
Use of this product, as intended, does not result in inhalation of excessive dusts.  
**Eye contact:** May cause eye irritation.  
**Environment Hazards:** No data are available on the adverse effects of this product on the environment.  
**Specific Hazards:** Dust explosion, like most finely divided organic powder.



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### 4. **First – aid measures**

#### **First-aid measures:**

<b>Inhalation:</b>	If inhaled, remove to fresh air and gargle with plenty of water. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion:</b>	Rinse out the mouth. Drink one or two glasses of water to dilute. Seek medical treatment if necessary.
<b>Skin contact:</b>	Wash with soap and water. Get medical attention if irritation develops.
<b>Eye contact:</b>	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 if irritation occurs.

### 5. **Fire – fighting measures**

#### **Extinguishing media**

<b>Extinguishing Media:</b>	water spray, CO <sub>2</sub> , foam and dry chemical. Do not use water jet.
<b>Hazardous thermal decomposition products:</b>	These product are carbon oxides (CO <sub>2</sub> ,CO), and smoke.
<b>Fire and Explosion Hazards:</b>	If dispersed in air, like most finely divided organic powders, may form an explosive mixture.
<b>Protection of fire-fighters:</b>	Use self-contained breathing apparatus.

### 6. **Accidental release measures**

<b>Personal precautions:</b>	Avoid inhalation, ingestion, eye and skin contact in case of accidental toner release.
<b>Environmental precautions and clean-up methods:</b>	No special precaution. Do not discharge into drains, rivers or the environment, dispose of waste toner in accordance with local requirements. Slowly sweep the material into a bag or other sealed container. Clean remainder with a damp cloth or vacuum cleaner. If a vacuum is used, it must be equipped with high efficiency particulate air filter and the motor must be rated as dust explosion-proof.

NOTE: see section 8 for personal protective equipment and section 13 for waste disposal.

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### 7. **Handling and storage**

<b>Handling</b>	Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Avoid contact with eyes.
<b>Storage:</b>	Keep container tightly closed and store in a cool, dry and well-ventilated area. Keep out of reach of children.
<b><u>Packaging materials</u></b> <b>Recommended use</b>	Use original container.

### 8. **Exposure controls/personal protection**

<b>Ventilation:</b>	Ventilation is not required under normal use,
<b>Hygiene measures:</b>	Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
<b>Occupational Exposure limits</b> <b>ACGIH:</b>	10 mg/m <sup>3</sup> TLV-TWA particulates not otherwise specified (Inhalable fraction). 3 mg/m <sup>3</sup> TLV-TWA particulates not otherwise specified (Respirable fraction). 0,2 mg/m <sup>3</sup> TLV-TWA Manganese and inorganic compounds, as Mn. 10 mg/m <sup>3</sup> TLV-TWA magnesium oxide (fume). 5 mg/m <sup>3</sup> TLV-TWA iron oxide dust & fume (Fe <sub>2</sub> O <sub>3</sub> ), as Fe.
<b><u>Personal protective equipment</u></b>	Not necessary for the normal use. In case of accidental dispersion used respiratory protection, eye protection, hand protection.

### 9. **Physical and chemical properties**

<b>Physical state:</b>	Solid ( fine powder ).
<b>Color:</b>	Yellow.
<b>pH</b>	Not applicable.
<b>Odor:</b>	Almost odorless.
<b>Melting point:</b>	ca. 125°C.
<b>Explosive properties:</b>	No data available.
<b>Specific Gravity:</b>	5.0 .
<b>Solubility:</b>	Insoluble in water.

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### 10. Stability and reactivity

<b>Stability:</b>	The product is stable under normal use.
<b>Hazardous Reactions:</b>	Dust explosion, like most finely divided organic powders.
<b>Conditions to avoid:</b>	Electric discharge, throwing into fire.
<b>Materials to Avoid:</b>	Oxidizing materials.
<b>Hazardous decomposition products:</b>	These product are carbon oxides (CO <sub>2</sub> ,CO), and smoke.

### 11. Toxicological information

<b>Acute toxicity:</b>	
<b>Acute toxicity oral (LD<sub>50</sub>):</b>	>2000 mg/kg (rat)*
<b>Acute toxicity dermal (LD<sub>50</sub>):</b>	Not available.
<b>Acute toxicity inhalation (LC<sub>50</sub>):</b>	Not available.
<b>Eye irritation:</b>	Not available.
<b>Skin irritation:</b>	Mild irritant (rabbit)*.
<b>Skin sensitizer:</b>	Non sensitizer (Guinea pig) *
<b>Chronic Toxicity or Long Term Toxicity:</b>	Prolonged inhalation of excessive dust may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dust.
<b>Carcinogenicity:</b>	Not listed in IARC Monographs.
<b>Mutagenicity (Ames test):</b>	Negative*
* Based on data for other products with similar ingredients.	

### 12. Ecological information

No data are available on the adverse effects of this material on the environment.

### 13. Disposal considerations

Dispose in according to 75/442/CEE and following modifications (91/156/CEE, 91/692/CEE, 96/59/CE and 96/350/CE) and in according to:

- Directive 91/689/CEE dangerous waste.
- Resolution 2000/532/CE and following modifications about institution of a new community waste's list.
- Directive 94/62/CE about packages and package's waste.

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**14. Transport information**

No special precaution.

**15. Regulatory information**

**EU regulations**

Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments.

<b>Symbol and Indication :</b>	Not required.
<b>R-Phrase :</b>	Not required.
<b>S-Phrase :</b>	Not required.

**16. Other information**

This Material Safety Data Sheet was prepared in compliance with EU Directive 91/155/EEC including amendments.

This information adds to those contained in the 'Instructions of use' for same product, but does not substitute them.

The information contained herein relates only to the referred product as manufactured and put into the market, and is not valid for other combinations of same materials.

It is the user's responsibility to determine the suitability of such information for his intended use.

<Abbreviation>

IARC:	International Agency for Research on Cancer.
LD <sub>50</sub> :	Lethal Dose 50: is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
LC <sub>50</sub> :	Lethal concentration 50: the concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours) is the LC50 value.
ACGIH:	American Conference of Governmental Industrial Hygienists.
EINECS	European Inventory of Existing Commercial Substances.
CAS	Chemical Abstract Service.

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