



## Markem-Imaje Standard Ink Policy

In order to best serve our customers, Markem-Imaje has incorporated most of the requirements of our customer's specification requests into the Markem-Imaje Standard Ink Policy (SIP). Please also refer to our C of C (certificate of compliance) and C of A (certificate of analysis). These documents state certification to Markem-Imaje Material Specifications (our manufacturing specifications) and to the Markem-Imaje SIP. Our C of C is provided as part of every shipping paper provided. The C of A is available upon request at the time of order placement. Markem-Imaje views the SIP as an ISO controlled document. The revision available on our website will always be the most current. If you have older revisions of the SIP which may have been distributed throughout your plant, please ensure that they are the current revision. Future revisions to this document will be posted immediately on this site.

Markem-Imaje has not and can not directly certify to non-Markem-Imaje specifications. Please refer to section 5.0 to determine if the testing performed will meet your requirements. Upon request, Markem-Imaje can and will use your specification or part number as part of our labeling certification process, however, these numbers are used for reference only and do not indicate compliance with customer specifications.

- 1.0 Use Before End
- 2.0 Quality Provisions
- 3.0 Packaging and Shipping
- 4.0 Conductivity
- 5.0 Third Party Specifications

### 1.0

#### Use Before End

##### 1.1

Definition: The term "Use Before End" replaces "Shelf Life" and refers to the time period for which M-I will warranty the performance characteristics of an ink, not necessarily the time during which an ink may be used successfully in any given process. More specifically, "Use Before End" cannot be strictly measured and is meant to characterize the general resistance level of a particular ink to deterioration by factors, including but not limited to, oxygen and ozone in the air, heat and light, or by internal chemical action. In all cases, the life of an ink is dependent on the variables of the chemistry of the individual ink product and its associated storage requirements. These variables differ not only from chemistry to chemistry and from ink series to ink series within a chemistry type, but can also vary from color to color within a series. Determination of the suitability of Markem-Imaje chemical products in any specific application is the sole responsibility of the buyer. Markem-Imaje specifically disclaims any implied warranties or merchantability or fitness of this product for a particular purpose. Where the "Use Before End" differs from that of the standard, the specified "Use Before End" will be noted on the technical data sheet and the technical data label for that product.

"Use Before End" is defined as the end of the month shown/calculated.

Example 1: Date of Manufacture is Dec 2009. Use Before End 7 months from date of manufacture. Markem-Imaje will warranty that batch of ink until 31 July 2010.

Example 2: Date of Manufacture is Dec 2009. Use Before End Jul 2010. Markem-Imaje will warranty that batch of ink until 31 July 2010.

## "Use Before End" Statements:

### 1.2

Single Part Fluid Inks Made to Order: The "Use Before End" statement for made to order single part fluid inks is 7 months from the date of manufacture. The 7 month period is calculated using 6 months for the customer plus a potential Markem-Imaje stocking period of 1 month. The 7204 series is 4 months from the date of manufacture.

Single Part Fluid Inks stocked at Markem-Imaje: The "Use Before End" statement for stocked single part fluid inks is 10 months from the date of manufacture. The 10 month period is calculated using 6 months for the customer plus a potential Markem-Imaje stocking period of 4 months.

### 1.3

Two Part Inks: The "Use Before End" statement for two part inks is 15 months from the date of manufacture. The 15 month period is calculated using 12 months for the customer plus a potential Markem-Imaje stocking period of 3 months.

### 1.4

Q2000/2001 OptiMark Film: The "Use Before End" statement for Q2000/20001 Optimark film is 24 months from the date of manufacture. The 24 month period is calculated using 12 months for the customer plus a potential Markem-Imaje stocking period of 12 months.

### 1.5

Thinners and Cleaners: The "Use Before End" statement for thinners and cleaners is 15 months from the date of manufacture. The 15 month period is calculated using 12 months for the customer plus a potential Markem-Imaje stocking period of 3 months.

### 1.6

Hot Melt Ink Jet Inks: The "Use Before End" statement for hot melt jet inks is 36 months from the date of manufacture. The 36 month period is calculated using 18 months for the customer plus a potential Markem-Imaje stocking period of 18 months.

### 1.7

Ink Rolls: The "Use Before End" statement for ink rolls is 24 months from the date of manufacture. The 24 month period is calculated using 12 months for the customer plus a potential Markem-Imaje stocking period of 12 months.

### 1.8

Thermal Transfer Ribbon: The "Use Before End" statement for TTR is 18 months from the date of manufacture. The 18 month period is calculated using 12 months for the customer plus a potential Markem-Imaje stocking period of 6 months.

## 2.0

### Quality Provisions

#### 2.1

##### ISO 9001:2000

Markem-Imaje Corporation is certified to ISO 9001:2000 by TÜV Essen. Download our ISO 9001 Certification. [ISO9001](#)

#### 2.2

##### Traceability

Markem-Imaje maintains a system for tracing lots of raw materials and finished ink products.

## 2.3

### Certification

Our Certificate of Compliance is provided as part of every shipping paper provided. A Certificate of Compliance or Certificate of Analysis is available with all shipments of Markem-Imaje fluid ink and chemical products upon request.

## 3.0

### Packaging and Shipping

#### 3.1

##### Protection Against Damage

Markem-Imaje products are packaged to afford maximum protection against damage during shipment. Markem-Imaje uses shipping containers and methods which comply with DOT and common carrier requirements. All shipping boxes meet all construction requirements of applicable freight classifications.

#### 3.2

##### Labeling

Ink containers are labeled with the following information as part of the standard label specification:

- Markem-Imaje product description including the container volume
- USA compliant hazard communication information
- Markem-Imaje part number & batch number
- Month/Year of manufacture and Country of Origin.
- "Use Before End" Statement

Hazardous inks going to Europe or Asia will have a European compliant label booklet applied.

We package according to DOT (Department of Transportation, IATA (International Air Transport Association) and common carrier regulations.

The customer's part number, and/or drawing or specification number can appear only on the Delivery Note (packing list) and is purely for the convenience of the customer and does not imply compliance of the product with any specification.

## 4.0

### Conductivity

#### 4.1

Markem-Imaje ink products are non-conductive. While the actual conductivity values will vary according to the pigments used, these pigments have been chosen for their low conductivity. No ingredients are added for the express purpose of raising electrical conductivity.

## 5.0

### Third Party Specifications

#### 5.1

## Obsolete Specifications

Markem-Imaje no longer certified inks to obsolete specifications. Inks listed as meeting obsolete specifications are for reference only.

### 5.2

#### Mil-Std-810 Method 508 (Fungus Resistance)

Inks series listed below contain a fungicide recommended for preventing fungal growth, and/or have been tested by an independent laboratory and reported to comply with MIL-STD-810 method 508 (revision current at the time of testing). 4166, 4255, 4263, 4402, 4403, 4407, 4461, 4465, 4481, 4485, 5801, 6868, 6881, 6893, 6926, 6957, 7204, 7224, 7226, 7227, 7234, 7235, 7251, 7252, 7254, 7261, 7265, 7295, 7906, 8829, 9060, 9076

### 5.3

#### Military Standard 883E Method 2015.11 (Resistance to Solvents)

Markem-Imaje ink series listed below were solvent resistant when tested as described in MIL-STD-883E Method 2015.11 after application in accordance with Markem-Imaje recommended procedures. Only certain inks are recommended for marking metal lidded LCC packages. Contact Markem-Imaje Technical Support for application recommendations. 4166, 4255, 4405, 4407, 4408R, 4460, 4461, 4465, 4466, 4481, 4488, 4489, 4496, 6868, 6893, 6896, 7204, 7224, 7227, 7251, 7254, 7261, 7265, 7281, 7290, 7401, 7904, 7906, 7907, 9040, 9060, 9065, 9081, 9090, 2700, 2701 Optimark film, 2900, 2901 Optimark film

### 5.4

#### Military Standard 202F Method 215J (Resistance to Solvents)

Markem-Imaje ink series listed below were solvent resistant when tested as described in MIL-STD-202F Method 215J after application in accordance with Markem-Imaje recommended procedures. (Only certain inks are recommended for marking metal lidded LCC packages. Contact Markem-Imaje Technical Support for application recommendations.) 4166, 4465, 4488, 4489, 4496, 6896, 7204, 7224, 7251, 7254, 7261, 7265, 7290, 7904, 9060, 2700 Optimark film, 2900 Optimark film

### 5.5

#### (OBSOLETE- no replacement) Federal Standard TT-I-1795A Amendment A Type I or II (Paragraphs 4.4.8.1.2 (Water) and 4.4.8.1.3 (Gasoline))

Markem-Imaje ink series listed below were resistant to soaking in water and gasoline when tested as described in Federal Standard TT-I-1795A Amendment A after application in accordance with Markem-Imaje recommended procedures. 4032, 4166, 4405, 4409, 4430, 4439, 4440, 4465, 4488, 6816, 6817, 6819, 6831, 6874, 6904, 7130, 7132, 7133, 7204, 7224, 7251, 7254, 7261, 7410, 7572, 7904, 7906, 8414, 8507, 8635, 8639, 8655, 8676, 8829, 8855

### 5.6

#### ODC

Markem-Imaje does not use any ozone depleting chemicals (including chloro-fluorocarbons (CFCs) and/or 1,1,1 trichloroethane) in any products sold or processes related to the manufacture of those products.

### 5.7

#### Miscellaneous

Markem-Imaje inks, not manufactured to the above specifications, are generally considered to be closer to gloss than semi-gloss. The only inks where gloss is checked and recorded are those manufactured for the above specifications.

### 5.8

#### (OBSOLETE see A-A-56032) Military Specification Mil-I-43553B

Markem-Imaje ink series listed below were resistant to the conditions required by the

environmental and storage sections of the military specification Mil-I-43553B Type 1 after application in accordance with Markem-Imaje recommended procedures. Although not every batch of ink is tested, Markem-Imaje would also expect that most Two Package Inks would also meet the Quality Conformance Inspection requirements of the military specification Mil-I-43553B Type 1.

4263, 4407, 7904, 7906, 7907, 7912

#### 5.9

(OBSOLETE- no replacement) Commercial Item Description A-A-208A Type I  
Markem-Imaje inks listed below were resistant to the Test Requirement conditions (with the exception of paragraph 4 (light and water spray resistance)) (Paragraph IV), Hazardous Material Requirements (Paragraph V) and Quality Assurance Requirements (Paragraph VI) of the commercial item description A-A-208A Type IV after application in accordance with Markem-Imaje recommended procedures.

8635 in the following colors: Black 37038, Green 34108, Red 31158, White 37875, Yellow 33538

#### 5.10

Commercial Item Description A-A-208B Type IV  
Markem-Imaje inks listed below were resistant to the Salient Characteristics (with the exception of paragraph 3.5 (shelf life)); the Regulatory Requirements and the Quality Assurance Requirements (with the exception of Examination and Testing paragraph 5.2.4) of the commercial item description A-A-208B Type IV after application in accordance with Markem-Imaje recommended procedures.

8635 in the following colors: Black 37038, Green 34108, Red 31158, White 37875, Yellow 33538

#### 5.11

Military Standard M-13231 (Thermal Shock)

Markem-Imaje ink series listed below were resistant to thermal shock when tested per MIL-M-13231C (ER) 4.8 after application in accordance with Markem-Imaje recommended procedures.

4166, 4263, 7224, 7254, 7261

#### 5.12

Commercial Item Description A-A-56032

Markem-Imaje ink series listed below were resistant to Salient Characteristics (with the exception of paragraph 3.7 (adhesion)), Regulatory and Quality Assurance Provisions of the Commercial Item Description A-A-56032 after application in accordance with Markem-Imaje recommended procedures.

4263, 4407, 7904, 7906, 7912

#### 5.13

Heavy Metals / CONEG

Markem-Imaje inks are formulated to meet the "CONEG" requirements for trace heavy metals including mercury (Hg), cadmium (Cd), lead (Pb) and hexavalent chromium (Cr VI).

#### 5.14

TSCA

All active Markem-Imaje chemical products are in compliance with all rules and orders of the Toxic Substances Control Act (TSCA).

#### 5.15

SONY Technical Standard SS-00259

Markem-Imaje Corporation is certified as a SONY Green a Partner. Our Certificate of Green Partner number is GPP-EU\_6567

5.16

RoHS.

This link will bring you to the list of Markem-Imaje inks that have been tested and found to comply with RoHS requirements.

[RoHS Compliant Inks](#)