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### **Executive Summary:**

On March 17, 2009, the European Union issued Commission Decision [2009/251/EC](#)<sup>2</sup> in an attempt to restrict or eliminate the use of **Dimethyl Fumarate** (DMF) in concentrations greater than 0.1mg/kg (0.1ppm) from products marketed in the EU.

Key Definitions applicable to this specific document:

**Shipper:** The business entity making the specific shipment (IBM, vendor, supplier, etc.)

**Manufacturer:** For the purposes of this document, manufacturer means the maker of the desiccant material itself.

**Shipper's Declaration of DMF Conformity:** This is a signed document on the shipper's letterhead affirming either the absence of desiccant or the presence of desiccant in their packages which complies with EU Decision 2009/251/EC requirements. See Q9.

**Manufacturer's Declaration of DMF Conformity:** This is a signed document from the **manufacturer** affirming that its desiccant products meet the EU 2009/251/EC requirements.

**Manufacturer's DMF Test Report:** This is documentation of laboratory analysis affirming the compliance of the desiccant sample provided by the manufacturer or shipper within limits allowed by EU 2009/251/EC (<0.1mg/kg). Per Italy, the laboratories must be ISO 17025 certified.

### **Q1. What is Dimethyl Fumarate (DMF)?**

A1. DMF (CAS Number 624-49-7) is a biocide occasionally used as an additive to some types of desiccant materials or by itself to prevent mold growth (anti-fungal agent). It is known to have been used for protecting leather goods such as shoes and furniture by being added as an ingredient in some types of desiccants used in the packaging of these commodities.

### **Q2. What is the concern with DMF?**

A2. According to the European Commission, contact with DMF in concentrations >1mg/kg (>1ppm) may result in severe allergic skin reactions for some individuals. The European Commission determined that a maximum limit of 0.1 mg/kg appropriately addresses the risk from DMF in products.

### **Q3. What is desiccant?**

A3. Desiccants are used for removing moisture and therefore are widely used in packaging applications. IBM uses desiccants for protecting many types of parts and products, especially, but not exclusively for items being shipped via ocean vessel. Users may recognize them as

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small fabric or paper pouches with granulated desiccant material inside. There are many types of desiccants; silica gel is one common type that apparently has been known to include DMF as an additive to combat mold growth. However, many types of silica gel are DMF free.

### Q4. **If DMF is used primarily for protecting leather goods, why is IBM concerned?**

Q4. Desiccant is a general commodity often used to protect a wide variety of goods including electronics to prevent corrosion of metallic surfaces. Therefore, it is important to verify that DMF is not inadvertently used in any packaging materials including desiccants that accompany IBM parts or products or other items imported on behalf of IBM.

### Q5. **When did this restriction become effective?**

A5. The EU decision became effective beginning on **May 1, 2009**. The decision primarily imposes requirements on the EU member states and is therefore subject to formal transposition by the EU states into local or national law. Note that some countries – including but not necessarily limited to Italy, Belgium, Spain and France – already have regulatory measures regarding consumer health from the biocide DMF. Italy has been aggressive in its enforcement including the requirement that all packages must be accompanied by a Declaration of Conformity signed by the shipper and written on company letterhead backed up by test reports (on file) from an ISO-17025 certified laboratory proving the absence of DMF.

### Q6. **What IBM Specifications are affected?**

A6. [IBM Packaging Specification 5897660](#)<sup>3</sup> has been updated to include this restriction which is effective immediately and shall be applied regardless of origin or destination. Contact your IBM Procurement representative for exceptional situations.

### Q7. **How do I know if the desiccants we're using are DMF free?**

A7. To our knowledge, there is no visual cue other than specific desiccant manufacturer's names printed on desiccant pouches and such print alone cannot be used for compliance. First, contact your desiccant supplier; otherwise, you may contact your IBM Procurement representative for assistance in identifying compliant sources.

### Q8. **Is it acceptable to simply quit using desiccants to avoid the issue altogether?**

A8. No. If desiccant is part of the packaging specification then it should remain. Where desiccants are specified by IBM or other manufacturers to be used for protecting a particular item, they must be used. There are many compliant types of desiccant available as well as other ways to protect electronic products from corrosion or other damage that may be caused by moisture. The IBM Packaging Engineer responsible for the product in question will make the final determination regarding the need for desiccants and/or appropriate technical alternatives.

### Q9. **What is the current situation in ITALY?**

A9. Reportedly, Italy has implemented strict inspection practices with regard to imports from **non-EU countries**. All packages being imported to Italy from any non-EU country are subject to inspection by Italian customs authorities, and it is reported that such inspections are increasing. The Italian customs authorities will only clear those shipments with a "Shipper Declaration of Conformity" which:

- (A) is written on the shipper's company letterhead;
- (B) refers to the specific case numbers associated with the declaration; and
- (C) addresses the status of desiccants in the shipment by stating either:
  - i) There are no desiccants included; or
  - ii) There are desiccants included which comply with EU 2009/251/EC.

Where the declaration indicates that desiccants compliant with EU 2009/251/EC are included in the shipment, a laboratory test report proving the absence of DMF is also required. The original declarations should be held on file at the shipper's location and available on demand. Placing them directly with the shipments is allowable but may not be best since Customs brokers will not have access to the shipments until final clearance activities occur. Therefore, making them available on request is preferred.

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Refer also to <http://www.ibm.com/procurement><sup>4</sup> and click on the link on the right side titled “[Supplier Instructions for Exports to IBM](#)”<sup>5</sup>. If major changes to these EU rules emerge, the requirements posted there will be updated accordingly.

### Q10. What desiccant manufacturers have already affirmed compliance to the DMF restrictions?

A10. We understand that the following suppliers have provided written declarations of no DMF and/or have provided laboratory test reports affirming the same. We provide this information for your information only. We do not endorse any of these suppliers and we look to you to do your own research and due diligence to confirm that there is no DMF in products you get from any supplier. As we get more information, we may (but are not required to) update this list.

- Desiccare
- Pro-Pack
- Sud-Chemie
- Dese Camen
- Quimy-Terra (made by Desiccare)
- Liyingda
- Riz Hao Rongtai
- Jian Wei
- Pro-Tech
- Micro-Pak
- 3M (made by Desiccare)

### Q11. Does it matter what the size of the pouch is?

A11. No, the EU directive focuses on concentration, not size. The restriction is based on 0.1mg/kg concentration limit regardless of the pouch size. That is the same as 0.1 parts per million (PPM) or 100 parts per billion (PPB)

### Q12. I have a Material Safety Data Sheet (MSDS) from my supplier, is this equivalent to a manufacturer’s test report?

A12. No. An MSDS is not likely to identify DMF at concentrations that are restricted, even if it was present. Therefore, a laboratory analysis specifically looking for DMF at concentrations equal to or below 0.1mg/kg is required.

### Q13. I have a signed letter of DMF compliance from my supplier; can this be used in lieu of a test report?

A13. No. Italian customs requires a signed “Shipper’s Declaration of Conformity” in addition to a test report from an independent ISO 17025 certified laboratory proving compliance. Desiccant Manufacturer’s declarations of conformity should still be collected and held on file in case of an audit.

### Q14. Who should I contact with other questions as they arise?

1. For general business related questions, refer to your IBM Procurement representative.
2. For technical questions as it relates to specific packaging implications, first contact the IBM Packaging Engineer with responsibility for that specific Brand product or part. If you do not know who that is, contact me, Bob Sanders at [btsander@us.ibm.com](mailto:btsander@us.ibm.com), or your IBM Procurement representative for help.
3. For questions about specific rules and enforcement in Italy contact IBM Trade Compliance: Daniela Balconi ( [daniela\\_balconi@it.ibm.com](mailto:daniela_balconi@it.ibm.com) )
4. For problems affecting current IBM shipments, contact Geodis Logistics Italy:

GEODIS LOGISTICS ZUST AMBROSETTI S.R.L.	Import/Export Mgr	Maria Fiorella Magni	0382616656 Mobile: 335.7721364	fiorella.magni@geodislogistics.it
GEODIS LOGISTICS ZUST AMBROSETTI S.R.L.	Import Traffic / Hand Carry Import	Monica Cirulli	0382616684	monica.cirulli@geodislogistics.it

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5. For all other questions, contact me, Bob Sanders, by sending an email to [btsander@us.ibm.com](mailto:btsander@us.ibm.com)

Are you reading this hardcopy? If so, only the softcopy file online at the following URL is considered to be the most current version.

<http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States~Information+for+suppliers#packaging><sup>6</sup>

As appropriate, as new information becomes available, this FAQ file will be updated online only.

Sincerely,



Robert T. Sanders

Sr. Technical Staff Member  
IBM Corporate Packaging and Global Logistics Environmental Compliance  
IBM Integrated Supply Chain

### Referenced Web Sites

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<sup>1</sup> <http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States~Information+for+suppliers#packaging>

<sup>2</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:074:0032:0034:EN:PDF>

<sup>3</sup> [http://www-03.ibm.com/procurement/proweb.nsf/objectdocswebview/fileibm+es+5897660,+apr+09:++packaging+materials,+restricted+heavy+metals/\\$file/5897660.180800a.pdf](http://www-03.ibm.com/procurement/proweb.nsf/objectdocswebview/fileibm+es+5897660,+apr+09:++packaging+materials,+restricted+heavy+metals/$file/5897660.180800a.pdf)

<sup>4</sup> <http://www.ibm.com/procurement>

<sup>5</sup> <http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States~Instructions+for+exports+to+IBM?OpenDocument&Parent=Global+Procurement>

<sup>6</sup> <http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States~Information+for+suppliers#packaging>