



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

NOV 14 2003

Mr. Michael F. Morrone  
Keller and Heckman LLP  
1001 G St., N.W. Suite 500 West  
Washington, D.C. 20001

Ref. No. 03-0199

Dear Mr. Morrone:

This is in response to your request for clarification of the small quantity requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether five of your client's (Selective Micro Technologies) Division 5.1 (oxidizer) cleaning products, which will be transported by ground and air, may be transported under the small quantity exceptions in § 173.4. Your requested confidential treatment for certain information contained in your letter is granted.

Based on the information you submitted, we agree that the five products may be offered for transportation and transported under the § 173.4 small quantity exceptions, provided the maximum quantity of material per inner receptacle is limited to 30 ml (1 ounce) for liquids and 30 g (1 ounce) for solids and all other requirements in § 173.4 are met. Your unabridged letter and drawings are enclosed.

I hope this information is helpful. If you have additional questions, please do not hesitate to contact this office.

Sincerely,

Hattie L. Mitchell, Chief  
Regulatory Review and Reinvention  
Office of Hazardous Materials Standards

Enclosures



030199

173.4

**KELLER AND HECKMAN LLP**

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August 5, 2003

Research and Special Programs Administration  
Office of Hazardous Materials Standards (DHM-10)  
U.S. Department of Transportation  
400 Seventh Street, S.W.  
Washington, D.C. 20590-0001

**Re: Selective Micro Technologies - Request for Clarification of Applicability of  
Small Quantity Exception**

Dear Sir or Madam:

Our client, Selective Micro Technologies (SELECTIVE MICRO), manufactures several cleaning products that contain [REDACTED], which is subject to regulation as a Division 5.1, Packing Group II material, along with [REDACTED]. SELECTIVE MICRO desires to ship these products via ground and air transportation to locations throughout the United States. Because SELECTIVE MICRO's products contain only a small quantity of material that satisfies the definition of a Division 5.1, oxidizer, the company believes that the products, as described herein, may be shipped pursuant to the terms of the U.S. Department of Transportation's (DOT's) small quantity exception (SQE) (49 C.F.R. § 173.4). The purpose of this letter is to request clarification of the applicability of the SQE to the shipment of these products. [REDACTED]

**Description of Products**

This letter concerns five cleaning products manufactured by SELECTIVE MICRO. Each of the products contains [REDACTED]. Depending on the application, these products will typically generate a pre-selected concentration ranging from [REDACTED]. The resulting [REDACTED] solution can serve as a [REDACTED]

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cleaning agent in a wide variety of applications. A more detailed description of each product is provided below.

Product 1 (2L50) - The first product in question is comprised of a small ( [REDACTED] ) polyethylene terephthalate glycol (PETG) disk enclosed within a two-liter pouch. The pouch, 8 mils in thickness, is constructed of metalized bi-axially oriented polypropylene with a foil layer attached (BOPP) and linear low-density polyethylene (LLDPE). The disk contains a mixture of [REDACTED]

The total weight of the mixture is less than [REDACTED] grams. A [REDACTED] is heat-sealed to the top of the disk to enclose the mixture, and the sealed disk is then placed within the BOPP/LLDPE pouch. A sachet containing two-grams of molecular sieve desiccant is added to the pouch to provide an extra measure of protection against trace water vapor penetration and to extend the shelf life of the product. Then the pouch, constructed with a polypropylene spout with tamper-evident seal and screw-on cap, is heat-sealed. To use the product, the tamper-evident seal is removed; the pouch filled with two liters of water and the cap screwed closed.

[REDACTED]

Product 2 (2L100) - This product is identical to Product 1, except that each pouch contains two disks instead of one. Therefore, the combined weight of [REDACTED]

[REDACTED]

Product 3 (2L500 - 1 sachet in envelope) - [REDACTED]

[REDACTED] The envelope is heat-sealed and then secured within the BOPP/LLDPE pouch. A sachet containing two-grams of molecular sieve desiccant is placed in the pouch. The pouch, which is constructed with a polypropylene spout, tamper-evident seal and screw-on cap, is heat-sealed. To use the product, the tamper-evident seal is removed; the pouch filled with approximately two liters of water and the cap screwed closed.

[REDACTED]

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Product 4 (1G-1) - This product is identical to Product 3 except for the exterior packaging. [REDACTED]

[REDACTED] The pre-formed package is identical in composition to that of the two-liter pouch described above, except it does not feature a spout and cap assembly. To use the product, the pre-formed package is opened, the desiccant discarded, and the envelope removed and placed in a container (such as a water tank) containing a predetermined volume of water. [REDACTED]

Product 5 (5G-1) - This product is essentially a scaled-up version of Product 4, with the pre-formed package containing two envelopes instead of one. Each package contains no more than [REDACTED]

#### Applicability Of SQE

SELECTIVE MICRO desires to ship multiple units of the above-described products in fiberboard boxes under the DOT's SQE. We believe that shipments of these products will satisfy the terms of the SQE in that:

- 1) "The maximum quantity of material per inner receptacle is limited to 30 grams." 49 C.F.R. § 173.4(a)(1)

Each of SELECTIVE MICRO's products contains no more than [REDACTED]

- 2) "Each inner receptacle is constructed of plastic having a minimum thickness of no less than 0.2 mm (0.008 inch)." 49 C.F.R. § 173.4(a)(2).

For each product, the disk or the envelope that contains the [REDACTED] will be placed inside a pouch (or package) constructed of BOPP/LLDPE with a minimum thickness of at least 8 mils.

- 3) "Each inner receptacle with a removable closure has its closure held securely in place with wire, tape, or other positive means." 49 C.F.R. § 173.4(a)(3).

The contents of the disks and the envelopes will be heat-sealed shut. In addition, the BOPP/LLDPE pouches/packages will either be heat-sealed and securely closed with a polypropylene screw cap (Products 1 – 3) or heat-sealed (Products 4 & 5).

- 4) “Unless equivalent cushioning and absorbent material surrounds the inside packaging, each inner receptacle is securely packed in an inside packaging with cushioning and absorbent material...” 49 C.F.R. § 173.4(a)(4).

When packaged in slotted fiberboard boxes, the BOPP/LLDPE pouch/package walls will protect the contents of each disk or envelope.

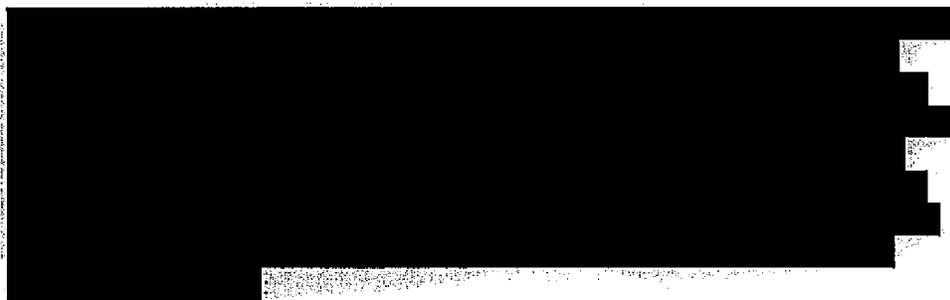
- 5) “The inside packaging is securely packed in strong outside packaging.” 49 C.F.R. § 173.4(a)(5).

The products will be packaged in a strong outside packaging as they will be packaged in a single-wall, corrugated, grade 150, regular, slotted box.

- 6) “The completed package, as demonstrated by prototype testing, is capable of sustaining... [drop tests].” 49 C.F.R. § 173.4(a)(6).

SELECTIVE MICRO has conducted the requisite testing, which has confirmed that the proposed packaging meets the specified standards.

- 7) “Placement of the material in the package or packing different materials in the package does not result in a violation of 49 C.F.R. § 173.21.” 49 C.F.R. § 173.4(a)(7).



- a. The BOPP/LLDPE pouches or pre-formed packages are heat-sealed, 8 mils thick, and designed specifically to prevent moisture from penetrating to their contents (the inner disk(s) or envelope(s) inside);

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b. [REDACTED]  
[REDACTED]; and

c. [REDACTED]  
[REDACTED]

- 8) "The gross mass of the completed package does not exceed 29 kilograms (64 pounds)." 49 C.F.R. § 173.4(a)(8).

SELECTIVE MICRO intends to ship approximately 10 to 50 units per package (*i.e.*, box). The typical package will contain 25 units and weigh no more than 35 pounds, and, in no case, will the gross mass of a package exceed the 64-pound limit.

- 9) "The package is not opened or otherwise altered until it is no longer in commerce." 49 C.F.R. § 173.4(a)(9).

Each package will remain sealed with packing tape until delivery is completed.

- 10) "The shipper certifies conformance with this section by marking the outside with the statement 'This package conforms to 49 CFR 173.4' " 49 C.F.R. § 173.4(a)(10).

Each package will bear the required marking.

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Please advise whether you agree that SELECTIVE MICRO's products, as described, may be shipped pursuant to the terms of the SQE. Should you have any questions or require further information, please do not hesitate to contact us. We look forward to receiving your response as soon as possible, so that SELECTIVE MICRO may ship its products accordingly.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael F. Morrone". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael F. Morrone