

DATE OUT: \_\_\_\_\_

SUBJECT: PRODUCT CHEMISTRY REVIEW OF:  
A MANUFACTURING-USE  OR AN END-USE PRODUCT   
DP Barcode 0234700 Reg. No. or File Symbol No. 69897-G

TO: (PM Team Reviewer)  
PM Team No. 31 Marshall Swindell

FROM: (Chemist/Date) Anna Skapars 4-16-97  
Product Chemistry Review Section  
Registration Support Branch/RD (WH705W)

THRU: Harold Podall, Ph.D., Section Head  
Registration Support Branch/RD (WH705W)

SUMMARY OF INFORMATION REVIEWED AND FINDINGS

This application is for registration of a new product for use in plastics, fibers, coatings, adhesives and sealants for non-food use applications.

- A. Confidential Statement of Formula dated 5-15-96 is in compliance with PR Notice 91-2 it agrees with the label and is acceptable. Alternate CSF is also acceptable. The attachment to CSF listing all starting materials is also acceptable.
- B. Provided product chemistry data in MRI D Nos 440031-01, 439911-01, 439911-2 and data enclosed with this submission no MRI D No given cover letter dated 3-20-97, these data provide data for Guideline Series 61, 62 and 63. These data are in compliance with 40 CFR part 158.155-158.190 and it satisfies product chemistry data for this product.
- C. When this product is used in paper and paperboard products and in adhesives it should be specified non food grade paper and adhesives.  
Use of this product in "water purification systems" should be deleted.

PRODUCT CHEMISTRY REVIEW

END-USE PRODUCT [ ] MANUFACTURING-USE PRODUCT [✓]  
EPA Reg. No. (or File Symbol No.) 69897-G

Registration [✓]

Reregistration [ ]  
Case No.: \_\_\_\_\_

DP Barcode/Chemist: D234700 Anna Skapov

- 1) \_\_\_\_\_ 3) \_\_\_\_\_  
2) \_\_\_\_\_ 4) \_\_\_\_\_

1. Product Name: Microfree B-558  
2. Company: Du Pont Specialty Chemicals  
3. Type of Submission: New [ ] Resubmission [✓] Amendment [ ]  
"ME-TOO" [ ] Alternate Formulation [ ] REPACK [ ]  
Expt Use Permit [ ] Other (Specify) \_\_\_\_\_

4. CONFIDENTIAL STATEMENT OF FORMULA

4a. Type of formulation and source registration

- Non-integrated formulation system [ ]
  - Are all TGAIs used registered • yes [ ] • no [ ]
- Integrated formulation system [✓]
- If "ME-TOO", specify EPA Reg. No. of existing product:

4b. Clearance of inerts for non-food or food use:

- Cleared for food use under 40CFR§180.1001:  
• yes [ ] • no [ ]. If yes: • c [ ] • d [ ] • e [ ]  
Cleared for non-food use: • yes [✓] • no [ ]

4c. Physical state of product: Powder

4d. The chemical IDs, analytical information (including that for the TGAIs), density, pH, and flammability are consistent with that given in GRN 61, 62, and 63-7, 63-12, and 63-15, respectively. • yes [✓] • no [ ]

- 4e. Density (or bulk density for solids): at °C. *4.4g/cc*
- 4f. pH (if dissolved or dispersed in water): *N/A*
- 4g. Flash point and/or flame extension: *N/A*
- 4h. NCs and CLs are acceptable: •  • not acceptable
- 4i. Active ingredient(s) NC LCL UCL
- |                         |              |              |              |
|-------------------------|--------------|--------------|--------------|
| A. <i>Silver</i>        | <i>0.60%</i> | <i>0.54%</i> | <i>0.66%</i> |
| B. <i>Cupric Oxide</i>  | <i>0.43%</i> | <i>0.39%</i> | <i>0.47%</i> |
| C. <i>Fine Silicate</i> | <i>0.80%</i> | <i>0.72%</i> | <i>0.88%</i> |
| D.                      |              |              |              |
- 4j. For products produced by an integrated formulation system:
- All impurities of toxicological significance have an UCL: • yes  • no  • not applicable
  - All impurities  $\geq 0.1\%$  in the product have been identified: • yes  • no  • not applicable

## 5. PRODUCT LABEL

- 5a. The active ingredients statement (chemical IDs and NCs) is consistent with the CSF: • yes  • no
- 5b. The formulation contains one of the following:
- 10% or more of a petroleum distillate: • yes  • no
  - 1% or more of methyl alcohol: • yes  • no
  - sodium nitrite at any level: • yes  • no
  - a toxic List 1 inert at any level: • yes  • no
  - arsenic in any form: • yes  • no
- 5c. If yes to any of the above, does the inert ingredients statement contain a footnote indicating this?  
• yes  • no  • not applicable
- 5d. The appropriate warning statement regarding flammability or explosive characteristics of the product are given on the label:  
• yes  • no  • not applicable

- 5e. The storage and disposal instructions for the pesticide and container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses:      • yes []      • no [ ]
- 6f. Does the product require an expiration date at which time the NC falls below the LCL (based on the one year storage stability data or other information):  
      • yes [ ]      • no []

6. PRODUCT CHEMISTRY (GRN 61, 62, 63)

6a. <u>Chemical IDs/Manufacture/Analytical Information</u>	<u>Accept of Information</u>	<u>MRID No.</u>
61-1 Chemical ID (see Appendix) <sup>1</sup>	A	CSF
61-2a Manufacturing Process <sup>2</sup>	A	
61-2b Formulation Method <sup>3</sup>	A	
61-3 Discussion of Impurities <sup>4</sup>	A	
62-1 Analysis <sup>5</sup>	A	
62-2 Certified Limits <sup>6</sup>	A	
62-3 Analytical Method for AIs <sup>7</sup>	A	

439911-02

6b. <u>Physical/Chemical Properties</u>	<u>Accept of Data</u>	<u>Value or qualitat descrip<sup>8</sup></u>	<u>MRID No.</u>
63-3 Physical State	A	Powder	
63-7 Density/Bulk Density (g/cc)	A	4.4g/cc	
63-12 pH of product <sup>9</sup>	N/A		
63-14 Oxid/Red Action	N/A		
67-15a Flash Point(°C) <sup>10</sup>	N/A		
63-15b Flame Extension	N/A		
63-16 Explodability	N/A		
63-17 Storage Stability (% degradation of AIs at 20-30°C for ≥ 1 year)	A	stable	
63-18 Viscosity	N/A		
63-19 Miscibility (with hydrocarbon solvents) <sup>11</sup>	N/A		
63-20 Corrosivity (specify metals/conditions)			
63-21 Dielectric Breakdown Voltage <sup>12</sup>	N/A		

**Explanations:** A = Acceptable; N = not acceptable; NA = technically not applicable; G = data gap; U = requires upgrading; W = waived; E = EPA estimate.

**Footnotes:** <sup>1</sup> See Confidential appendix A for additional information; <sup>2</sup> For MP/EP products produced by an integrated formulation system; <sup>3</sup> For products produced from a TGAI or MP; <sup>4</sup> May be waived unless actual/possible impurities are of tox concern; <sup>5</sup> Five batch analysis required for products produced by an integrated formulation system; <sup>6</sup> If different from standard CLs recommended in 40 CFR 158.175, this should be discussed in Confidential Appendix A; <sup>7</sup> Abbreviate method used as follows: gas chromatography (GC), infrared (IR), ultraviolet absorption (UV), nuclear magnetic resonance (NMR), etc. <sup>8</sup> Provide brief description, e.g., color - yellow or property value, e.g. density 1.25 g/cc. Unless otherwise indicated, the property should be at 25 C; <sup>9</sup> If product is a water solution or dispersion; <sup>10</sup> Not required for aerosols; <sup>11</sup> Emulsifiable liquids only; <sup>12</sup> For end-use products used near electrical equipment.

Attachment: Confidential Appendix A (page 5).

cc: Reviewer's Name and Central File (Reg. No. or Rereg Case No.) \* H7505W:RD:RSB:PCRS:CS-  
1:Rxxxx:Reviewer's Name:Typist Initials:xx/xx/94:703-308-xxxx:Code (Reg or Rereg No).  
<PCFORM>

**TABLE 1: SUMMARY OF PRODUCT CHEMISTRY DATA REQUIREMENTS**

GLR #	TITLES	
<b>Series 61-Product Identity and Composition (40CFR§158.155, 160, 162, 165 &amp; 167)</b>		
61-1	Product Identity & Disclosure of Ingredients	
61-2	Description of Starting Materials & Manufacturing Process	
61-3	Discussion of Formation of Impurities	
<b>Series 62-Analysis and Certification of Product Ingredients (40CFR§158.170, 175 &amp; 180)</b>		
62-1	Preliminary Analysis of Product Samples	
62-2	Certification of Ingredient Limits	
62-3	Analytical Methods to Verify Certified Limits	
<b>Series 63-Physical and Chemical Characteristics (40CFR§158.190)</b>		
63-2	Color	
63-3	Physical State	
63-4	Odor	
63-5	Melting Point	
63-6	Boiling Point	
63-7	Density, Bulk Density, or Specific Gravity	
63-8	Solubility	
63-9	Vapor Pressure	
63-10	Dissociation Constant	
63-11	Octanol/Water Partition Coefficient	
63-12	pH	
63-13	Stability	
63-14	Oxidizing or Reducing Action	
63-15	Flammability	
63-16	Explosibility	
63-17	Storage stability	
63-18	Viscosity	
63-19	Miscibility	
63-20	Corrosion Characteristics	
63-21	Dielectric Breakdown Voltage	

A - Acceptable  
W - Waived  
NA - Not Applicable  
DG - Data Gap

Reviewer: \_\_\_\_\_

Section Head \_\_\_\_\_

Date: \_\_\_\_\_