Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product’s recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 2091 P100 Filter
MANUFACTURER: 3M
DIVISION: Occupational Health & Environ. Safety
ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 08/11/11
Supercedes Date: 08/11/11
Document Group: 08-7810-8

Product Use:
Intended Use: Respiratory Protection

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polypropylene</td>
<td>9003-07-0</td>
<td>80 - 100</td>
</tr>
<tr>
<td>Polyester</td>
<td>25038-59-9</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Polypropylene cover web</td>
<td>Unknown</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Non-Woven Material
Odor, Color, Grade: Various colored filters, no odor
General Physical Form: Solid
Immediate health, physical, and environmental hazards: This product, when used under reasonable conditions and in accordance
with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
No health effects are expected.

Skin Contact:
No health effects are expected.

Inhalation:
No health effects are expected.

Ingestion:
No health effects are expected.

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

Not determined.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: No need for first aid is anticipated.
Skin Contact: No need for first aid is anticipated.
Inhalation: No need for first aid is anticipated.
If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>707.00 - 752.00 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits(LEL)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits(UEL)</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).
Unusual Fire and Explosion Hazards: Not applicable. No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Not applicable.

6.2. Environmental precautions
Not applicable.

Clean-up methods
Not applicable.
For the unused product, collect and recycle spilled product.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING
This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2 STORAGE
Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Not applicable.

8.2.2 Skin Protection
Not applicable.

8.2.3 Respiratory Protection
Not applicable.

8.2.4 Prevention of Swallowing
Not an expected route of exposure.

8.3 EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester</td>
<td>CMRG</td>
<td>TWA, as respirable dust</td>
<td>5 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>
Polyester  CMRG  TWA, as total dust  10 mg/m³
Polypropylene  CMRG  TWA, as respirable dust  5 mg/m³
Polypropylene  CMRG  TWA, as total dust  10 mg/m³

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

- **Specific Physical Form:** Non-Woven Material
- **Odor, Color, Grade:** Various colored filters, no odor
- **General Physical Form:** Solid
- **Autoignition temperature:** 707.00 - 752.00 °F
- **Flash Point:** Not Applicable
- **Flammable Limits (LEL):** Not Applicable
- **Flammable Limits (UEL):** Not Applicable
- **Boiling Point:** Not Applicable
- **Density:** Not Applicable
- **Vapor Density:** Not Applicable
- **Vapor Pressure:** Not Applicable
- **Specific Gravity:** Not Applicable
- **pH:** Not Applicable
- **Melting point:** No Data Available
- **Solubility In Water:** Not Applicable
- **Solubility in Water:** Nil
- **Evaporation rate:** Not Applicable
- **Volatile Organic Compounds:** Not Applicable
- **Kow - Oct/ Water partition coef:** No Data Available
- **Percent volatile:** Not Applicable
- **VOC Less H2O & Exempt Solvents:** No Data Available
- **Viscosity:** Not Applicable

**SECTION 10: STABILITY AND REACTIVITY**

- **Stability:** Stable.

**Materials and Conditions to Avoid:**

10.1 Conditions to avoid
None known

10.2 Materials to avoid
None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.
Hazardous Decomposition or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldehydes</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Hydrocarbons</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Methane</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Ketones</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Toxic Vapor, Gas, Particulate</td>
<td>Not Specified</td>
</tr>
</tbody>
</table>

**Hazardous Decomposition:** Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION**

Not applicable.

**CHEMICAL FATE INFORMATION**

Not applicable.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Reclaim if feasible. Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility. Current EPA regulations do not restrict the disposal of this product when it has NOT been used, but since local regulations can vary, consult applicable regulations or authorities before disposal.

Since regulations vary, consult applicable regulations or authorities before disposal.

**SECTION 14: TRANSPORT INFORMATION**

**ID Number(s):**
70-0706-1438-6, 70-0706-1441-0, 70-0706-1445-1, 70-0708-4353-0, WJ-7005-0040-0, WJ-7005-0041-8, WX-7001-0006-7, WX-7009-0007-8

For Transport Information, please visit http://3M.com/TransportInfo or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: REGULATORY INFORMATION**
US FEDERAL REGULATIONS
Contact 3M for more information.

311/312 Hazard Categories:
Fire Hazard - No  Pressure Hazard - No  Reactivity Hazard - No  Immediate Hazard - No  Delayed Hazard - No

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

INTERNATIONAL REGULATIONS
Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification
  Health: 0  Flammability: 1  Reactivity: 0  Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:
Sections 3 and 9: Odor, color, grade information was modified.
Section 1: Emergency phone information was deleted.
Company Logo was deleted.
Copyright was deleted.
Section 16: Disclaimer (second paragraph) was modified.
Section 16: Web address heading was deleted.
Section 5: Unusual fire and explosion hazard information was modified.
Section 6: Release measures information was deleted.
Section 6: Release measures heading was deleted.
Section 13: Waste disposal method information was modified.
Section 10: Materials and conditions to avoid physical property was deleted.
Section 14: Transportation legal text was modified.
Section 9: Boiling point information was modified.
Section 5: Flammable limits (UE) information was modified.
Section 5: Flammable limits (LEL) information was modified.
Section 9: Property description for optional properties was modified.
Section 1: Address line 1 was deleted.
Section 1: Address line 2 was deleted.
Section 9: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (UEL) information was modified.
Section 14: ID Number Heading Template 1 was added.
Section 14: ID Number(s) Template 1 was added.
Section 2: Ingredient table was added.
Section 8: Exposure guidelines ingredient information was added.
Section 8: Exposure guidelines data source legend was added.
Section 6: 6.2. Environmental precautions heading was added.
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
Section 10.1 Conditions to avoid heading was added.
Section 10.2 Materials to avoid heading was added.
Section 16: Web address was added.
Section 6: Personal precautions information was added.
Section 6: Environmental procedures information was added.
Section 6: Methods for cleaning up information was added.
Section 10: Materials to avoid physical property was added.
Section 10: Conditions to avoid physical property was added.
Section 1: Address was added.
Copyright was added.
Company logo was added.
Section 6: Clean-up methods heading was added.
Telephone header was added.
Company Telephone was added.
Section 1: Emergency phone information was added.

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