

SPECIFIER NOTE: THIS DOCUMENT IS INTENDED TO BE A GUIDE FOR RESEARCHING ENVIRONMENTAL ISSUES RELATIVE TO BUILDING PRODUCTS. ISSUES ARE ORGANIZED UNDER THREE PRIMARY CATEGORIES: RESOURCE MANAGEMENT, TOXICITY, AND PERFORMANCE.

## **ENVIRONMENTAL IMPACT QUESTIONNAIRE (EIQ)**

### **I. DIRECTIONS**

A. Complete the following questionnaire and submit for review to:

\_\_\_\_ Jen Ester \_\_\_\_\_

\_\_\_\_ 1500 St. Olaf Ave. \_\_\_\_\_

\_\_\_\_ Northfield, MN 55057 \_\_\_\_\_

B. Relate information concerning only one product per questionnaire.

C. All questions may not apply to every product or manufacturer. It is not expected the manufacturer will have addressed all of the environmental concerns expressed in the EIQ.

1. Respond to every question even if response is "not available", "not applicable", or "no".

2. Attach additional sheets as required. Reference additional sheets to correspond with the question number.

### **II. IDENTIFICATION**

A. Material/Product: \_\_\_\_ Wood Casework \_\_\_\_\_

Brand Name: \_\_\_\_ Signature Series – Style 5 \_\_\_\_\_

Manufacturer: \_\_\_\_ Kewaunee Scientific Corporation \_\_\_\_\_

What is the primary use or application for this product?

\_\_\_\_ To store laboratory materials and equipment, to provide a surface for laboratory experiments and demonstrations, and to serve as framework for sinks and fume hoods.

\_\_\_\_\_

\_\_\_\_\_



2. Products Containing Wood: Are wood materials obtained from certified sustainable forestry operations:   X  Y   N? (If specifically requested).

a. If yes, provide name of certification organization for each wood species being used in this project.

<u>Species</u>	<u>Certification Organization</u>
<u>  </u> Red Oak, Maple <u>  </u>	<u>  </u> Forest Stewardship Council <u>  </u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>

b. If no, state where the product resources are produced and describe forestry operations.

<u>Product Resources</u>	<u>Forestry Operations</u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>

C. Recycled Content:

1. List recycled materials used as product raw materials; distinguish pre-consumer and post-consumer materials. Provide percentage amounts in relation to complete (100 percent) product.

<u>Recycled Material</u>	<u>% Pre-Consumer</u>	<u>% Post-Consumer</u>
<u>  </u> Unknown whether, aluminum, steel and plastic components contain any amount of pre- or post-consumer material.		
<u>  </u>	<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>	<u>  </u>

D. Embodied Energy:

1. Product Transport:

a. Where are raw materials acquired? Identify state and country.

<u>Raw Material</u>	<u>Source (State and Country)</u>
<u>  </u> wood <u>  </u>	<u>  </u> Georgia-Pacific – southeastern U.S. <u>  </u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>

b. Describe means of transporting raw materials to the manufacturing plant.

Raw Material

Transportation

all materials

truck

c. Where is product manufactured/fabricated? Identify state and country.

North Carolina

d. Is the product warehoused locally, regionally, or nationally?

National Distributor – GA; all other warehouses in NC

e. Describe means of transporting product to distribution facilities.

Truck

2. Production Energy: List energy sources used in production process; indicate which are renewable energy sources (e.g. wind, solar). Provide percentage amounts in relation to complete (100 percent) product.

Energy Sources

Renewable

Percentage

Natural Gas – Petroleum Products

Y X N

100%

Y N

Y N

3. Provide an embodied energy study of the product from extraction of raw materials through production and assembly. Include an estimate for the total number of BTU's required per pound of finished products. Identify parameters for study.

Unavailable

4. Describe measures the manufacturer has taken to minimize energy usage in the production process.

Unavailable





5. Describe the manufacturer's active steps to minimize or eliminate production wastes; include process of liquid and solid waste material treatment or reclamation if performed at manufacturing site.

  Sawdust recycled  

  Stains applied in closed environment to contain contamination area; no VOCs or solvents used  

  Excess stain from top coat collected and reused; no VOCs or accumulation of hazardous waste.  

6. Describe the manufacturing procedures and chemicals involved that would be considered better than industry standard.

  see above  

B. Toxic/Hazardous Contents (carcinogens and other hazards inherent in product/material):

1. Provide a complete chemical profile of the item; include all chemical components and provide percentage amounts in relation to complete (100 percent) product; identify biocides (mildewcides or in-can preservatives) and carcinogens listed by any of the following:

- a. United States Environmental Protection Agency (EPA) Carcinogen Assessment Group (CAG) list of carcinogens.
- b. Clean Air Act Sections 109, 111, and 112.
- c. The National Toxicology Program's latest published "Annual Report on Carcinogens".
- d. IARC Human Carcinogens (Group 1, 2A, and 2B).
- e. California Proposition 65.

LT. GOLDEN OAK STAIN (Used as an example. See Appendix for MSDS for each finish)

<u>Chemical</u>	<u>Carcinogen</u>	<u>Percentage</u>
<u>  Petroleum Hydrocarbon  </u>	<u>  Y  </u> <u>  N  </u>	<u>          </u>
<u>  Mixed Hydrocarbons  </u>	<u>  Y  </u> <u>  N  </u>	<u>          </u>
<u>  2-Heptanone (MAK)  </u>	<u>  Y  </u> <u>  N  </u>	<u>          </u>
<u>  Isobutyl Acetate  </u>	<u>  Y  </u> <u>  N  </u>	<u>          </u>

\_\_\_\_\_ Isopropanol \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

\_\_\_\_\_ Butanol \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

Butyl Acetate

Aliphatic Hydrocarbon

C. Material Safety Data Sheet (MSDS):

1. Provide Material Safety Data Sheet (MSDS).

- a. Articles: Finished products which are manufactured off-site and shipped to the project for installation while conforming to Title 29 of the Code of Federal Regulations, OSHA Hazard Communication Regulation 29CFR 1910.1200, Section (b)5 and Section (c) are defined as articles. If by being defined as an article, a MSDS has not been developed for a particular product, then provide MSDS on raw materials, goods, and items used in the fabrication of that article.

D. Outgassing/Reactivity:

1. Chlorofluorocarbon (CFC):

- a. Are CFC's or HCFC's used in the manufacture and/or content of the item specified:

\_\_\_\_\_ Y \_\_\_\_\_ N?

- b. If CFC's or HCFC's were previously used in the product and/or its manufacture, describe measures taken by manufacturer to eliminate their use.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Indoor Air Quality:

- a. Does the product outgas (emit) carcinogens or other hazardous substances into the air after installation, including final curing/drying: \_\_\_\_\_ Y \_\_\_\_\_ N?

- b. If yes, submit IAQ test report.

E. Electromagnetic Radiation:

1. Does the product emit electromagnetic radiation: \_\_\_\_\_ Y \_\_\_X\_ N?

2. If yes, at what rate per hour? \_\_\_\_\_

3. If yes, describe methods for installation, use, and maintenance of product to minimize generation of and occupant exposure to electromagnetic radiation.

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F. Compliance with Regulations (Environmental Statutory Compliance):

1. Does the manufacturer meet all federal, state, and local environmental laws, including laws governing air emissions, waste water treatment, and solid waste disposal/treatment:

\_\_\_Y \_\_\_N? Unknown

2. Has the manufacturer met the above criteria for the previous five years: \_\_\_Y \_\_\_N?

3. List the applicable standard.

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4. Does the product meet applicable industry standards, such as ASTM, Green Seal, manufacturing standards, LA or NY research report numbers, and UL approvals: \_\_\_Y \_\_\_N? List these standards.

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**V. PERFORMANCE - INSTALLATION**

A. Environmental Procedures/Precautions:

1. Describe special procedures and precautions to be used while handling and installing the product:

\_\_\_Product fully assembled prior to installation – minimal impact from installation\_\_\_

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2. Identify accessories, such as fasteners, sealers, and adhesives that are non-toxic (or less toxic than industry standard), energy efficient, or recycled or recyclable products?

\_\_\_Unknown\_\_\_

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B. Installation Energy:

1. Product Transport: List the means to transport the finished product to the construction site.

Trucks

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2. Installation: List energy means and describe energy requirements for installation of the product.

Unknown

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C. Construction Waste:

1. List the recommended method(s) for proper products disposal; stipulate preferred method and restrictions which might apply.

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2. Comment on the environmental impact of the product as a waste material.

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3. Packaging:

- a. Describe packaging for the product.

Cardboard Boxes

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- b. Does manufacturer accept return of used packaging for reuse:   Y   N?

- c. If yes, state limitations and procedures for packaging return.

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**VI. PERFORMANCE - OPERATIONS**

**A. Maintenance**

1. Describe the recommended cleaning and maintenance for the product using products which have minimal VOC emission.

See Maintenance Guide in report Appendix – can be cleaned easily with mild detergent and water  
\_\_Touch-up paint also available for wood finishes. \_\_\_\_\_

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2. Estimate the “useful life” expectancy for this product.  
\_30-40 years or more – still have some productive examples from 1939 in their showrooms

3. Are replacement parts available: \_\_X\_Y \_\_N?  
a. If yes, can replacement parts be installed in the field: \_\_X\_Y \_\_N?

4. Provide a copy of the life cycle analysis for this product.
5. Provide a copy of the manufacturer’s warranty for this product.

**B. Energy Efficiency (energy required to operate/maintain):**

1. Estimate BTU’s required to operate the product when new? \_\_\_\_\_; after five years?  
\_\_\_\_\_; after ten years? \_\_\_\_\_ Unknown

**C. Compliance with Regulations (Environmental Statutory Compliance):**

1. Does the product meet all federal, state, and local environmental laws, including laws governing energy efficiency and air emissions: \_\_Y \_\_N? Unknown
2. Has the product met the above criteria for the previous five years: \_\_Y \_\_N?
3. List the applicable standards.

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**VII. CORPORATE COMMITMENT**

A. Corporate Environmental Policy:

1. Provide copy of manufacturer's stated environmental policies.

**Environmental Statement**

Kewaunee Scientific Corporation recognizes that our environment is the responsibility of not only the individual, but the corporate community as well. The success of our customers, our employees, and our company depends on the ability of us all to sustain the resources that underlie the products and services we offer and use.

1. To provide laboratory furniture, fume hoods, and accessories that minimize energy consumption and adverse environmental impact by designing, engineering, and manufacturing products
  - o that use renewable and recyclable resources,
  - o that use less energy and resources to install and operate, and,
  - o that match the building life cycle, withstanding the rigors of decades of use, relocation and reuse.
  
2. To manufacture these products in an environmentally responsible manner.

<<http://www.kewaunee.com/environment.asp>>

**END OF ENVIRONMENTAL IMPACT QUESTIONNAIRE**