



Scotchprint® Toner Series 8700/8800

What Is Product Responsibility?

The goal of Product Responsibility at 3M is to address expectations that society, our customers and we have for products that can be manufactured, distributed, used and disposed of safely. We want to make sure product responsibility extends throughout the entire life of a product. Life Cycle Management (LCM) is one process used at 3M to help understand and manage the environmental, health and safety (EHS) impacts. LCM stresses the efficient and safe use of resources in 3M products throughout their life cycle to guide responsible design, development, manufacturing, use and disposal.

Product Description

3M's Scotchprint® Toner Series 8700/8800 is a four color, solvent-based toner system for electrostatic printing.

The inks are available in four colors; yellow, magenta, cyan and black. Reference Product Bulletin 8700 for a complete listing of premixes and concentrates.

Product Risk Characterization

Product risk characterization is a key element of product responsibility. The principle goal is to identify, characterize and mitigate adverse effects on human health and the environment. It must also be attentive to corporate, customer and societal expectations for safe and environmentally responsible products.

3M environmental, health, and safety professionals have evaluated the solvents in the piezo ink series 6800 and have concluded that if the products are handled correctly and the necessary precautions are taken, hazards from solvent exposure can be minimized.

Storage

Toner series 8700/8800 is a Class II Combustible liquid; the flash point of the toners and concentrates is 104°F (40° C). Check with local fire code officials for quantity limitations and other storage requirements. Storage requirements for product performance are detailed in the Product Bulletin.

Transportation

Toners may be regulated for shipping. In the United States, toners are not regulated for ground shipment. They are, however, regulated for air shipments and should not be shipped by air without proper documentation. Opened toner bottles (foil seal broken) no longer meet UN packaging guidelines and cannot be shipped air without special UN-approved overpacking containers.

IMPORTANT NOTICE

Toners are classified as regulated materials for air shipment. You, the shipper, are responsible for complying with all transportation regulatory requirements. This includes: classification, packaging, labeling, marking, documentation and training.

Precautionary Information

Ventilation

The local exhaust ventilation requirements are included in the 3M Scotchprint® Printer 2000 Electronic Graphics System Site Preparation Guide.

Additional printers or other equipment that may be present in the room also need to be considered when planning room ventilation.

Exposure Limits

Follow ventilation recommendations to prevent solvent overexposure. Exposure limits are levels of airborne concentrations that, if not exceeded, should prevent adverse health effects in most workers. The toners contain Naphthol Spirits, which has an established exposure limit. To determine the airborne concentrations of the solvent in the toners, a qualified individual, e.g. a Certified Industrial Hygienist, can perform air monitoring. 3M Organic Vapor Monitors may also be used to assess exposure levels with toner series 8700/8800. The monitoring will determine if the exposure limit for the solvent has been exceeded. If there is overexposure, check that your ventilation system meets ventilation recommendations.

Reference web page
<http://www.aiha.org/Content/AccessInfo/consult/consultlisting.htm> for AIHA (American Industrial Hygiene Association) member/consultant information.

Odor Thresholds

There are no established odor thresholds for the Scotchprint® Toner Series 8700/8800. Detecting an odor does not equate with being exposed to a hazard. During the printing process the odors of the solvent in the toners may be detectable at very low concentrations. These are considered nuisance odors, and may also be detectable in finished graphics.

Personal Protective Equipment

Because toner series 8700/8800 is solvent-based, there is potential for skin, eye and throat (inhalation) irritation. Personal protective equipment (PPE) that should be used when working with the inks include: safety glasses with side shields (unvented goggles if there is a splash potential) to protect eyes and butyl rubber gloves to protect skin. Nitrile rubber is recommended as the glove material that will protect for more than 8 hours. Other glove materials may be appropriate for shorter exposure times. Respirators should be used when working with toners if concentrations of solvent exceed the exposure limits. It is always a best practice to reduce exposure levels by engineering improved ventilation rather than relying on PPE. If respirators are used, annual training, fit testing, and an annual medical certification, as well as other requirements, are required as stated in the OSHA respirator standard, 29 CFR 1910.134.

Potential to Emit

The toners contain volatile organic compounds (VOCs). Normal operation of the printers with these toners may result in emission of VOCs into the environment.

VOC emissions = 1.98 lbs (898g)/hour = 8.68 tons (7,875 kg)/year. Based on estimates and testing, the Scotchprint® Printer 2000 produces the following potential air emissions: emissions = 15 grams/minute = 47.58 lbs (21.6 kg)/day = 1.98 lbs (898g)/hour = 8.68 tons (7,874.3 kg)/year.

Depending on other sources of emissions present at your facility, and on applicable federal, state and local regulations, your facility may be required to obtain various air permits prior to operation of the printer or prior to use of these C-based inks. Consult your local or state air quality agency for information on regulations that may be applicable to your facility and this new equipment.

Reference web page www.4cleanair.org for local and state agency information.

Material Safety Data Sheets and Product Labels

As your supplier, 3M has a vested interest in your health and safety. 3M Material Safety Data Sheets (MSDSs) and product labels give you information you need to know to handle our products safely.

MSDSs are sent out with the first shipment of toners to a new customer. When the MSDS is updated, customers will receive the updated document with their next order.

Read the container label and MSDS for health hazard data, precautionary information, suggested first aid and environmental information when handling the inks. For 3M product health and safety information, or in case of an emergency, call 1-651-737-6501 or 800-364-3577.

MSDSs are available on the 3M's Internet page www.3M.com/MSDS. Enter product information into the fields to search and find the desired MSDS.

Disposal

Waste from the printer can occur in three ways:

1. Toners

The toners are considered hazardous waste according to the U.S. EPA. They are classified as D001 ignitable. EPA requires that any toner waste must be incinerated in a permitted hazardous waste incinerator or disposed of in a permitted hazardous waste facility.

2. Printer Wiping Cloths

The printer wiping cloths can be disposed of in the general trash or in a landfill if free liquid cannot be squeezed out. If toner liquid can be squeezed out, the cloth should be incinerated in a permitted hazardous waste incinerator or disposed of a permitted hazardous waste facility.

3. Plastic Bottles

Once bottles are empty of free liquid, dispose of the bottles in the general trash or in a landfill. The toner bottles are made of High-Density Polyethylene (HDPE) plastic as indicated by the recycling number "2". Check with your local recycler regarding recycling the bottles in your area.

Spill Response

During the printing or transferring process toner spills may occur. If a spill occurs, observe the precautions stated in the MSDS. Ventilate the area and contain the spill. Cover the spill with absorbent material and collect the spilled material. Place the spill clean-up materials in a closed container. The disposal recommendations for waste toners and blotting cloth also apply to spill clean-up materials.

Hardware Safety

The 3M Scotchprint® Electronic Printers are hardware equipment. When using any equipment, always follow the manufacturers' instructions for safe operation.

Chemical Inventories and Product Registrations

The printers are sold globally; therefore, the toners need to be cleared for both domestic and global sale. Some countries have chemical control laws which require the ingredients in the product to be listed on their inventory of substances before import is allowed.

Disclaimer

This bulletin conveys environmental, health and safety information for a product. The information provided is accurate to the best of our knowledge but is not intended to be exhaustive. Distributors and users of 3M products remain responsible for complying with all applicable laws and regulations.

3M Related Literature

Before starting any job, be sure you have the most recent product and instruction bulletins.

The following related bulletins may be of interest. You may view and print these Bulletins from our website at www.3Mgraphics.com.

Subject	Bulletin No.
Scotchprint® Toner Series 8700/8800	8700
Using Scotchprint® Toner Series 8700/8800	4.12



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