

GENERAL ELECTRIC

J. B. DONEGA
BLDG. #1
HUDSON FALLS PLANT
HF-3A

INDUSTRIAL AND POWER
CAPACITOR PRODUCTS DEPARTMENT
OPERATING INSTRUCTIONS

SUBJECT THE USE AND HANDLING OF PYRANOL		DATE EFFECTIVE September 1, 1972	NO. M90.7
PREPARED BY Manager- Safety & Environ- mental Programs	APPROVALS Mgr-Manufacturing Mgr-Emp. & Labor Relations	SUPERSEDES NO. NEW DATE	PAGE 1 OF 3

GENERAL:

1. Pyranol is a GE Trade Name for a dielectric liquid (polychlorinated biphenyl) used in capacitors and transformers.
2. Its primary use within this Department is as an impregnant in most classes of capacitors both in the Industrial and Power Product lines.
3. The following instructions are issued to emphasize the proper precautions to be followed when working with this material.

SKIN CONTACT:

1. Contact with Pyranol should be avoided. Continued exposure to Pyranol may produce an allergic skin irritation in some people. Those having such a problem should report it to the Dispensary.
2. Employees shall not immerse their unprotected hands in Pyranol.
3. Rubber or plastic gloves shall be worn to protect hands when they are immersed in Pyranol.
4. Clean cotton gloves may be worn under rubber gloves to provide additional protection from heat or over rubber gloves to provide additional protection from sharp edges. Cotton, rubber, and plastic gloves should be accumulated for cleaning (vapor degrease) in a container designated by supervision.
5. Aprons, available at the Toolcrib, shall also be worn to minimize contact with Pyranol. Aprons should be accumulated for cleaning (vapor degrease) in a container designated by supervision. Clothing that has been in contact with Pyranol should be washed before it is worn again.
6. Hands and other exposed areas should be washed with a mild soap and lukewarm water following contact or exposure to Pyranol. Solvents should not be used, since they remove natural oils and may themselves produce a skin rash and undesirable vapors. Hands must be washed before eating, drinking, smoking, or using sanitary facilities.
7. Eating, drinking, and smoking are not permitted in any area where Pyranol or Pyranol vapors are present.

EYES:

1. Safety glasses are required in all areas where Pyranol is present. Safety glasses with side shields or a face shield should be worn when handling Pyranol.

PLAINTIFF'S
EXHIBIT

1285

EXHIBIT 9

775074

6003095

GENP 003476

SUBJECT THE USE AND HANDLING OF PYRANOL		DATE EFFECTIVE September 1, 1972	NO. M90.7
PREPARED BY Manager- Safety & Environ- mental Programs	APPROVALS Mgr-Manufacturing Mgr-Emp. & Comm. Relations	SUPERSEDES NO. NEW DATE	PAGE 2 OF 3

EYES: (Continued)

2. If Pyranol gets into the eyes, they should be flushed immediately with large quantities of cool water. The employee should then be taken to the Dispensary for additional medical attention as follows:
 - a. Examine eyes.
 - b. Further eye washing with water if necessary.
 - c. Apply antibiotic ointment to eyes.

VAPOR:

1. Exposure to Pyranol must be minimized.
2. Exhaust and ventilation systems shall be provided to control the concentration of Pyranol vapors in the operator working and breathing areas.
3. If a system fails to operate properly, the foreman or unit manager and the Manager of Safety & Environmental Programs must be notified immediately. The affected facility will be shut down until repairs are completed.
4. The Manager of Safety & Environmental Programs will determine in what situations tests of the ambient air are appropriate and will cause all appropriate tests to be taken.
5. Under no circumstance may a person enter a tank or vessel which contains or has contained Pyranol, until the Pyranol concentration has been found to be safe. If entry must be undertaken, a self-contained breathing device (air pack) must be worn. A safety line should be attached to the worker and an observer and crew, capable of removing the worker from the tank, must also be present at the tank entrance.
6. If a heated tank or vessel containing Pyranol must be opened, the source of heat must be isolated and the tank allowed to cool to a maximum temperature of 80°C (176°F) before opening.

INTERNAL: (Swallowing)

If an employee should swallow any quantity of Pyranol, DO NOT induce vomiting. Immediately assist the affected employee to the Dispensary. If nurse is not available, contact Dr. Feingold and take employee to the Emergency Room at the Glens Falls Hospital immediately for necessary treatment by a physician. The treatment recommended by the Industrial and Power Capacitor Department's Physician is as follows:

1. Evacuate stomach using a Levine gastric tube, then copious lavage.

775075

6003096

GENERAL ELECTRIC

ROME

MEDIUM TRANSFORMER DEPARTMENT DEPARTMENT INSTRUCTION

SUBJECT PYRANOL CONTAINMENT		DATE EFFECTIVE 8/1/72	NO. MG 5.7
PREPARED BY Plant Engineering and Equipment Procurement	APPROVALS 7/14/72 Manager, Manufacturing Engr. Manager, Adv. Develop. Engr.	SUPERSEDES NO. NEW DATE	PAGE 1 OF 3

PURPOSE:

To establish procedures for handling Pyranol to prevent the PCB's contained therein from entering the ground or waterways of the area. No material containing any trace of Pyranol is to be disposed of in any other manner than specified herein.

RESPONSIBILITY:

The Plant Engineering and Equipment Procurement Unit shall be responsible for establishing procedures for handling of Pyranol and auditing for compliance.

Shop Operations shall be responsible for the adherence to the established procedures to prevent the improper disposal of any material containing the PCB's (Pyranol).

Advance Development Engineering Laboratory shall be responsible for all testing and provide technical assistance.

BODY:

1. All samples, used by the Laboratory, shall be disposed of by putting in collection tank at the vacuum fill area. All spills shall be cleaned up with fuller's earth and rags. This material shall be collected in drums obtained from scrap and salvage. When full, the drum will be sealed, marked "Pyranol Contaminated Material" and sent to the Scrap and Salvage Area for storage until shipped to an authorized destruction incinerator.
2. The unload hose will have the valve closed at all times, except when actually transferring material, and the end placed in the pipe provided to prevent any spillage on the ground. Drip pan under the pipe from the hose end receptacle shall be drummed along with the fuller's earth from the filter presses.
3. Plant Engineering shall be notified of any spills on the ground. The spills shall be cleaned up with fuller's earth. The fuller's earth and dirt shall be picked up and placed in drums obtained from Scrap and Salvage. These drums shall be marked "Pyranol Contaminated Material" and sent to Scrap and Salvage for storage until shipped to an authorized incinerator for destruction.
4. All tanks shall have their overflow pipe tied to a common header which shall be piped to the two 500-gallon tanks in the Oil House. All shall have a flow switch that will sound an alarm if any flow is detected. When either tank is one-half full the tank shall be pumped into the factory return tank.

R B LANDERLEN
BLDG I 142



SALES

AUG 14 1972

M O M E

775071

GENP 003473

NO. MG 5.7	SUPERSEDES NO.	DATE EFFECTIVE	MEDIUM TRANSFORMER DEPARTMENT
PAGE 2 OF 3	NEW DATED	8/1/72	DEPARTMENT INSTRUCTION

5. All spills in the Oil House shall be cleaned up using fuller's earth which shall be drummed along with old fuller's earth from filter presses and sent to Scrap and Salvage for holding until sending to an authorized incinerator for destruction.
6. All fuller's earth and filter paper used on Pyranol shall be placed in drums when removed from filter presses and sent to Scrap and Salvage for storage or sending to an authorized incinerator for destruction.
7. All rags, paper wipers, fuller's earth, etc., used in cleaning up any Pyranol spills or cleaning any tools, hose, hands, etc., shall be collected and put in drums obtained from Scrap and Salvage. These drums when full shall be sent to the Scrap and Salvage Unit marked "Pyranol Contaminated Material". Scrap and Salvage shall properly store the material until shipped to an authorized incinerator for disposal.
8. All pyranol units returned from the field for rework shall be drained of liquid and the material either returned to the Oil House for reuse or pumped into the waste pyranol tank car, to the rear of the Sound Room, for containment until sent to an authorized incinerator for destruction. Laboratory personnel will decide where after testing.
9. All insulation or wood parts that are not to be reused in a pyranol transformer shall be placed in drums obtained from Scrap and Salvage. These drums shall be sent to Scrap and Salvage Unit marked "Pyranol Contaminated Material". Scrap and Salvage shall properly store the material until shipped to an authorized incinerator for disposal.
10. Vacuum Fill, Tanking and Finishing Areas shall use drip pans under all pyranol hose connections while filling or removing pyranol from a transformer. When the hose is not connected to a transformer the end will be placed in a drip pan so that all pyranol will be contained.
11. Drip pans shall be emptied into the collection tanks in the Vacuum Fill Area or in Finishing Area.
12. When the collection tanks become full the Laboratory shall be contacted to sample the collection tank to determine where the material is to be transferred. Within limits established by the Laboratory the liquid within the collection tank will be sent to the Oil House or to the destruction collection tank car on siding behind the Sound Room.
13. When the destruction tank car is near to being full Plant Engineering is to be contacted (by Laboratory or Oil House personnel) to arrange for transportation to an authorized incinerator for destruction.
14. All valves in dyke drains shall be kept closed at all times. When water becomes deep (6" average) Plant Engineering is to be contacted for proper disposal.

MEDIUM TRANSFORMER DEPARTMENT DEPARTMENT INSTRUCTION	DATE EFFECTIVE 8/1/72	SUPERSEDES NO. NEW DATED	NO. MG 5.
			PAGE 3 OF

15. At no time shall pyranol be placed into sanitary drain system, storm drain system, into open ditches, on the ground, or into the land-fill area.
16. Plant Engineering and Equipment Procurement is to audit the system on a monthly basis to assure procedures are being followed.
17. Periodic samples of storm water run off and sanitary effluent will be Laboratory analyzed to determine the effectiveness of the containment program.