

University of Pittsburgh Safety Manual	EH&S Guideline Number: 04-032	
Subject: UNKNOWN CHEMICALS	Effective Date: 09/27/2016 Review Date: 09/21/2023	Page 1 of 1

GUIDELINES FOR THE SAFE HANDLING OF UNKNOWN CHEMICALS

Unknown chemicals and samples are periodically discovered in laboratories and shops. If unknown chemicals, products or samples are found, the following guidelines should be reviewed to ensure the “unknown” materials are handled appropriately.

1. Review all sources of information to possibly determine the identification of the material.
 - 1.1 Review past and current procedures and projects that have been conducted in the laboratory (or shop) with colleagues. Any information obtained may be helpful in suggesting what the unknown material may be.
 - 1.2 Physical characteristics of the unknown material such as color or appearance may offer hints on what the material may be. The characteristics of the container (size, shape, type, color, etc.) may also provide some insight regarding material identification.
 - 1.3 Chemical inventories should be reviewed and may provide some suggestions as to what the unknown material may be.
 - 1.4 If the material is identified through this process, label the container with a Waste Chemical label; identify the contents of the material on the label, and dispose of the material through the Chemical Waste Program.
2. If the material is still not identified, it should be considered an unknown waste.
3. Visually evaluate the unknown material. If the container is compromised, damaged, swollen, or bulging, contact Environmental Health and Safety (EH&S) immediately (412-624-9505) for additional guidance.
4. If the unknown material shows visible evidence of crystal growth within the container, or salt formation around the cap, contact EH&S immediately (412-624-9505) for additional information.
5. If the unknown material appears to be stable, and appears to be something that can be handled safely, label the container with a Waste Chemical label, identify the material as “unknown” and contact EH&S (412-624-9505) to make arrangements for the safe removal of the material.

The University’s chemical waste contractor will perform an analysis to determine the hazardous properties of the material. The material will be categorized appropriately, managed through the Chemical Waste Program, and safely transported to an approved off-site disposal facility.