Standard Operating Procedures

**for Hazardous Chemicals**

MTU Safety Manual @ <http://www.admin.mtu.edu/fm/oshs/manual.htm>

CEE Dept. Chemical Hygiene Plan @ http://www.civil.mtu.edu/docu/rtknow/rttoknow.html

Civil and Environmental Engineering, Michigan Technological University

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| --- | --- | --- | --- |
| Date: | Nov 15, 1999 |  |  |
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| # pages: | 2 |  |  |

**#1 PROCESS**

Extracting petroleum asphalt from pavement samples.

**#2 HAZARDOUS CHEMICALS/CLASS OF HAZARDOUS CHEMICALS**

Trichloroethene (TCE)

**#3 PERSONAL PROTECTIVE EQUIPMENT**

**Safety goggles** – ANSI Z87.1-1989

**Suggested Glove Type Model Number** **Thickness Breakthrough Time**

 PVA Edmont 25-545 0.38 mm 480 min

Viton North F-091 0.25mm 390 min

Butyl rubber North B-174 0.64mm 10 min

Nitrile North LA-142G 0.36mm 4 min

# **Apron**- Nitrile or Neoprene

Wear above listed personal protective equipment when working with Trichloroethene.

**#4 ENGINEERING/VENTILATION CONTROLS**

Use in ventilated area.

**#5 SPECIAL HANDLING PROCEDURES AND STORAGE REQUIREMENTS**

Keep containers closed when not in use.

**#6 SPILL AND ACCIDENT PROCEDURES**

EYE CONTACT: Immediately flush eyes with cool flowing water continuously for 15 minutes, lifting eyelids occasionally. Immediately call for medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash contact area with mild soap and water. Rinse thoroughly. Seek medical attention if skin rash persists.

IF INHALED: remove to fresh air.

**Small Spill:** Do not attempt cleanup if you feel unsure of your ability to do so or if you perceive the risk to be greater than normal laboratory operations. Do not exceed the PEL of 100 ppm or the ceiling limit of 300 ppm during cleanup activities. If you are confident in your ability to clean up the spill, pick up the liquid with absorbent and place in appropriate storage containers (see CHP 2.2.2). Make sure spilled chemical is compatible with other chemicals that may be in designated storage container.

**Large Spill:** Notify others in area of spill. Evacuate area, dial 123, notify second knowledgeable source, remain in area in safe location to restrict access and assist with response.

**#7 WASTE DISPOSAL**

Disposal of liquid/solid spilled waste: Hold for waste disposal authorization/pickup by MTU OSHS per MTU Civil & Env. Engineering Chemical Hygiene Plan.

**#8 PERMIT APPROVAL REQUIRED**

YES (carcinogen and possible mutagen)

**#9 DECONTAMINATION**

Wash area with soap and water. Ventilate area. Wash clothing before reuse.

**#10 DESIGNATED AREA**

YES ( carcinogen and possible mutagen)