



# Standard Practice for Placarding Solvent Vapor Degreasers<sup>1</sup>

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## 1. Scope

1.1 This practice is intended to provide warnings, first aid, and operating instructions for posting on vapor degreasers.

1.2 These warnings are intended to supplement other specific warnings applicable to the actual solvent or equipment in use.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

### 2.1 ASTM Standards:

D 3698 Practice for Solvent Vapor Degreasing Operations<sup>2</sup>

D 4276 Practice for Confined Area Entry<sup>2</sup>

### 2.2 OSHA Regulations:

29 CFR 1910.1000 OSHA Department of Labor Subpart Z, Toxic and Hazardous Substance, Permissible Exposure Limits<sup>3</sup>

### 2.3 ACGIH Documents:

TLV-TWA Threshold Limit Values—Time Weighted Averages<sup>4</sup>

## 3. Significance and Use

3.1 Since the operation of a vapor degreaser involves the use of halogenated hydrocarbons, it is important that a solvent vapor degreaser be properly labeled to convey the health hazards of the solvent in use.

3.2 This practice is useful in providing general warning and operating instructions for posting on solvent vapor degreasers.

3.3 The following paragraphs outline items to be included on vapor degreaser placards.

3.4 Any specific or additional information should be requested from the supplier.

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee D-26 on Halogenated Organic Solvents and Fire Extinguishing Agents and is the direct responsibility of Subcommittee D26.05 on Industrial Hygiene.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 15.05.

<sup>3</sup> Available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.

<sup>4</sup> Available from the American Conference of Governmental Industrial Hygienists, 6500 Glenway Ave., Bldg. D-7, Cincinnati, OH 45211-4438.

## 4. General Requirements

4.1 Vapor degreaser placarding may also be subject to applicable federal, state, and local laws and regulations.

4.2 Placards should be posted on the vapor degreaser in a prominent place(s), accessible to workers using the equipment.

## 5. Requirements for Warning Statements

5.1 Post the following general warning statements on the solvent vapor degreaser:

5.1.1 **This Machine Contains: (Name of Solvent).**

5.1.2 **Warning! Vapor Harmful**

5.1.3 **Avoid Prolonged or Repeated Breathing of Vapor.** High vapor concentrations may cause unconsciousness or death.

5.1.4 **Use Only with Adequate Ventilation.** Ventilation must be sufficient to limit vapor exposures below established OSHA or ACGIH levels, or the solvent manufacturer's suggested health guidelines. Eye irritation and dizziness are indications of overexposure.

5.1.5 **Do Not Cut or Weld on or Near This Machine,** unless all solvent has been drained and the equipment aired out. Fire or explosion can result.

5.1.6 **Do Not Enter This Machine Unless Proper Tank Entry Procedures Are Followed.** Refer to Practice D 4276 for detailed procedure.

5.1.7 **Do Not Take Internally.** Swallowing may cause injury, illness, or death.

5.1.8 **Avoid Prolonged or Repeated Contact with Skin.** Contact may cause skin irritation and dermatitis.

5.1.9 **Do Not Get in Eyes;** Will cause discomfort and irritation.

5.1.10 **Do Not Smoke in the Vicinity of This Machine.**

5.1.11 **Consult Material Safety Data Sheet for Additional Information.**

## 6. First Aid

6.1 Post first aid instructions on the solvent vapor degreaser.

6.1.1 Consult supplier Material Safety Data Sheet or label for appropriate first aid statements.

## 7. Operating Practices

7.1 Post the following operating instructions on the solvent vapor degreaser:

7.1.1 *Prior to Operation:*

7.1.1.1 Refer to manufacturer's operating manual or to Practice D 3698 for detailed operating instructions.

7.1.1.2 Refer to solvent supplier's Material Safety Data Sheet.

7.1.1.3 Wear appropriate personal protective equipment.

7.1.2 *Start-Up:*

7.1.2.1 Turn on cooling/condensing system and check for proper operation.

7.1.2.2 Start air exhaust fan (where provided).

7.1.2.3 Check solvent level.

7.1.2.4 Turn on heat supply.

7.1.2.5 Bring vapors to proper operating level.

7.1.3 *Degreasing:*

7.1.3.1 Do not overload the degreaser.

7.1.3.2 The final cleaning step should be a dwell in the vapor zone; do not remove work until condensation stops.

7.1.3.3 Position parts so that they may drain completely.

7.1.3.4 Vertical speed of work being lowered into or raised

out of vapor should not exceed 11 ft/min.

7.1.3.5 If spray is used, hold the nozzle well below the vapor level.

7.1.3.6 Close cover when degreaser is not in use.

7.1.4 *Shut Down:*

7.1.4.1 Shut off heat supply.

7.1.4.2 Shut off cooling/condensing system after vapor level drops below condensing area.

7.1.4.3 Shut off exhaust fans.

7.1.4.4 Close covers.

7.1.5 *Malfunction:*

7.1.5.1 In the event of machine malfunction, notify supervisor immediately.

## 8. Keywords

8.1 chlorinated solvents; degreaser; labeling; solvent vapor degreasing; vapor degreasing

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