

FACT SHEET

R307-353 Plastic Parts Coatings

Overview

The Utah Division of Air Quality, R307-353, was adopted as part of a package of rules designed to help minimize pollution along the Wasatch Front. The rule applies to plastic coating operations in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties. The rule is designed to limit volatile organic compound (VOC) emissions from operations that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

Requirements

You have the option of either limiting the amount of VOC coatings applied or limiting VOCs by using add on control systems. Work practices to be followed are also outlined.

VOC Content Limits

Automobile and Truck Plastic Parts Coating Lines

(values in pounds of VOC per gallon of coating, minus water and exempt solvents)

Table 1

Coating Category	VOC Limit
High Bake Coating (Exterior & Interior)	
Prime	4.5
• Flexible Coating	3.5
• Non Flexible Coating	
Topcoat	4.3
• Basecoat	4.0
• Clearcoat	4.3
• Non Basecoat/Clearcoat	
Air Dried Coating (Exterior Parts)	
Prime	4.8
Topcoat	
• Basecoat	5.0
• Clearcoat	4.5
• Non Basecoat/Clearcoat	5.0
Air Dried Coating (Interior Parts)	5.0
Touch up and Repair	5.2

Utah Division of Air Quality

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General Air Quality information, regulations, and contact information:
<http://www.airquality.utah.gov>

This fact sheet provides general information concerning the Plastic Parts Coatings rule. See <http://www.rules.utah.gov/publicat/cod e/r307/r307-353.htm> for the entire rule.

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Considerations:

- For red and black coatings, the emission limitation shall be determined by multiplying the appropriate limit in Table 1 by 1.15.
- When EPA Method 24 is used to determine the VOC content of a high bake coating, the applicable emission limitation shall be determined by adding 0.5 to the appropriate limit in Table 1.
- When EPA Method 24 is used to determine the VOC content of an air-dried coating, the applicable emission limitation shall be determined by adding 0.1 to the appropriate limit in Table 1.

Business Machine Plastic Parts Coating Lines

(values in pounds of VOC per gallon of coating, minus water and exempt solvents)

Table 2

Coating Category	VOC Limit
Prime	2.9
Topcoat	2.9
Texture Coat	2.9
Fog Coat	2.9
Touch Up and Repair	2.9

Other Plastic Product Coating Categories

(values in pounds of VOC per gallon of coating, minus water and exempt solvents)

Table 3

Coating Category	VOC Limit
General One-Component	2.3
General Multi-Component	3.5
Electric Dissipating and Shock-Free	3.0
Extreme Performance	2.5 (2 Pack)
Metallic	3.5
Military Specification	2.8 (1 Pack) 3.5 (2 Pack)
Mold Seal	6.3
Multi Colored	5.7
Optical	6.7
Vacuum Metalizing	6.7
Mirror Backing	
• Curtain Coated	4.2
• Roll Coated	3.6

If a part consists of both plastic and metal surfaces and is exempted from the requirements for existing metallic surface coating lines, the part shall be subject to this rule.

Add-On Controls Systems

An incinerator, carbon adsorption, or any other add-on emission control system operated and maintained:

- In accordance with the manufacturer recommendations.
- To achieve and maintain at least 90% capture and control efficiency.

Continuous emission reduction during all operational periods.

Document:

- Rule requirements are attained.
- Records of key system parameters are maintained, including;
 - Temperature, pressure and flow rates and operator inspection schedule.
- Monitoring and recordkeeping, as required by rule.

Work Practices to be Followed

Control techniques including:

- Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- Minimize spills; clean up immediately;
- Convey any coatings, thinners, and cleaning materials in closed containers or pipes;
- Close mixing vessels and other materials except when specifically in use; and
- Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.

Coating application method:

- Achieve a minimum of 65% transfer efficiency.
- The following applications achieve this requirement:
 - Electrostatic application; Flow cot; Dip/electrodeposition coat; Roller coat; High-volume, low-pressure (HVLP) spray; Airless spray; Other methods equal to or better than HVLP, as certified by the manufacturer.

Solvent cleaning operations:

- Cleaning material with VOC content of 0.21 pounds per gallon or less excluding compounds not classified as VOC.

Exemptions

Stencil, safety-indicating, electric insulating and thermal conducting, magnetic data storage disk, plastic extruded onto metal parts, textured finish coatings and if a coating line is subject to the requirements for existing automobile, light-duty truck, and other product and material coatings or for existing metallic surface coating lines.

Record Keeping

Maintain records, for a minimum of two years, demonstrating compliance.

