



FACT SHEET

R307-353 Plastic Parts Coatings

Overview

The Utah Division of Air Quality Rule R307-353, was adopted as part of a package of rules designed to help minimize pollution. The rule is designed to limit volatile organic compound (VOC) emissions and applies to plastic coating operations in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties. Effective September 1, 2018, R307-353 shall apply to plastic parts coating operations that use a combined 20 gallons or more of coating products and associated solvents per year.

Requirements

You have the option of either limiting the amount of VOC coatings applied or limiting VOCs by using add on control systems. (See entire rule for all circumstances.)

Exemptions

The provisions of this rule shall not apply to any of the following:

- Stencil, safety-indicating, electric insulating and thermal conducting, magnetic data storage disk, plastic extruded onto metal parts to form a coating; and textured finishes.
- 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, the coating line shall be exempt from this rule.
- Canned aerosol coating products up to 22 fl. oz. that are used exclusively for touch-up and repairs.
- Aerospace vehicles and components.
The provisions of R307-353 shall not apply to coating products on medical devices up to 800 pounds of VOC per year.
Research and development, quality control, or performance testing activities.

Add-On Controls Systems

If an add-on control system is used, the owner or operator shall install and maintain the add-on emission control system in accordance with the manufacturer recommendations and maintain 90% or greater capture and control efficiency. The overall capture and control efficiency shall be determined using EPA approved methods or an alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

Utah Division of Air Quality

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Contact

(801) 536-4000

General Air Quality information, regulations, and contact information:
<https://deq.utah.gov/Divisions/daq/index.htm>.

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

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VOC Content Limits

Automobile and Truck Plastic Parts Coating Lines

(values in pounds of VOC per gallon of coating, minus water and exempt solvents
(compounds not classified as VOC as defined in R307-101-2), as applied)

Table 1

Coating Category		VOC Limit (lb/gal)
High Bake Coating (Exterior & Interior) Parts		
Prime	• Flexible Coating	4.5
	• Non Flexible Coating	3.5
Topcoat	• Basecoat	4.3
	• Clearcoat	4.0
	• Non Basecoat/Clearcoat	4.3
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

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
(compounds not classified as VOC as defined in R307-101-2), as applied)

Table 2

Coating Category	VOC Limit (lb/gal)
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
(compounds not classified as VOC as defined in R307-101-2), as applied)

Table 3

Coating Category	VOC Limit (lb/gal)
General One-Component	2.3
General Multi-Component	3.5
Electric Dissipating and Shock-Free Coatings	3.0
Extreme Performance	3.5 (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.

Work Practices

The owner and operator shall:

- Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
- Clean up spills 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.

No person shall apply VOC containing coatings unless the coating is applied with equipment operated according to the manufacturer specifications, and by use of one of the following methods:

- Electrostatic application;
- Flow coat;
- Roller coat;
- Dip/Electrodeposition coat;
- Airless sprayer;
- High-volume, low-pressure (HVLP) spray; or
- Other application method equal to or better than HVLP, as certified by the manufacturer.

Solvent cleaning operations shall be performed using cleaning materials having a VOC composite vapor pressure no greater than 1 mm Hg at 20 degrees Celsius, unless an add-on control device is used.

Record Keeping

Maintain records, for a minimum of two years, of inventory and product data sheets of all coatings and solvents applied. If an add-on control device is used, and the physical characteristics that demonstrate compliance with R307-353. Records shall be made available to the director upon request.

