
Exposure to Hexavalent Chromium Final Results

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Coil Coaters Information Request: Exposure to Hexavalent Chromium

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Survey Background: In October, a questionnaire was distributed to coil coaters concerning each facility's utilization of hexavalent chrome and possible exposure to plant employees. A total of 32 coil coating plants returned the survey out a possible 80. This represents a 4% response rate. The following statistics are shown in this report:

Base - The number of respondents analyzed in the given question.

Mean - Sum of all values divided by the total number of responses; average. The mean is a measure of central tendency.

Lowest/Minimum - Lowest figure reported for the given question.

Highest/Maximum - Highest figure reported for the given question.

Median/50th Percentile - The value above and below which half of the responses lie when the values are arranged in order of magnitude. The median is the measure of central tendency not sensitive to outlying values – unlike the mean, which can be affected by a few extremely high or low values.

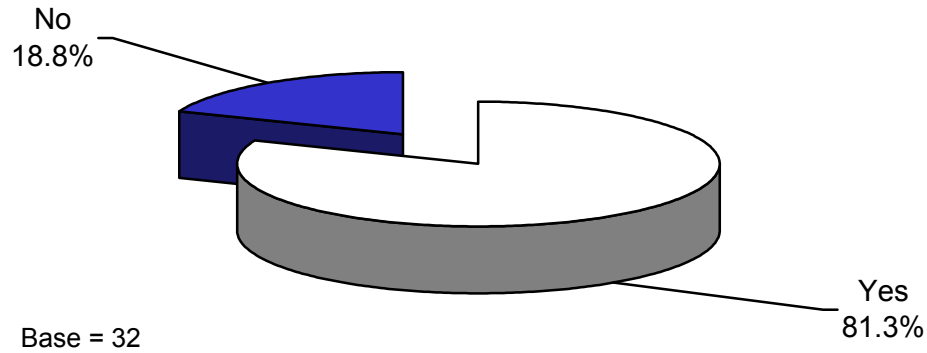
1) How many employees work at this plant site or are part of all coil coating activities associated with this company?

Statistics	# Employees at Plant Site	Plant Site Base	Total # of Employees at Company	Company Base
Mean	53	22	479	22
Median	55	22	350	22
Lowest/Minimum	3	22	12	22
Highest/Maximum	112	22	1500	22
% of Companies with Less than 500 Employees			50%	11
% of Companies with 500 or More Employees			50%	11

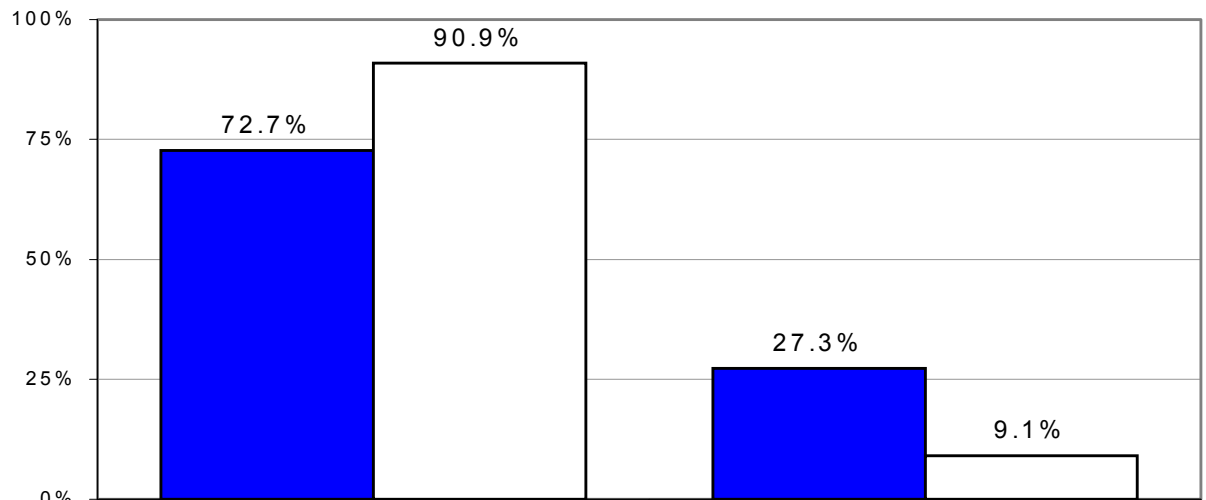
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2) Do you use hexavalent chrome in your pretreatment section?

Use of Hexavalent Chrome in Your Pretreatment Section - Overall



Hexavalent Chrome in Your Pretreatment Section by Size of Company



■ Less than 500 Company Employees	72.7%	27.3%
□ 500 or More Company Employees	90.9%	9.1%

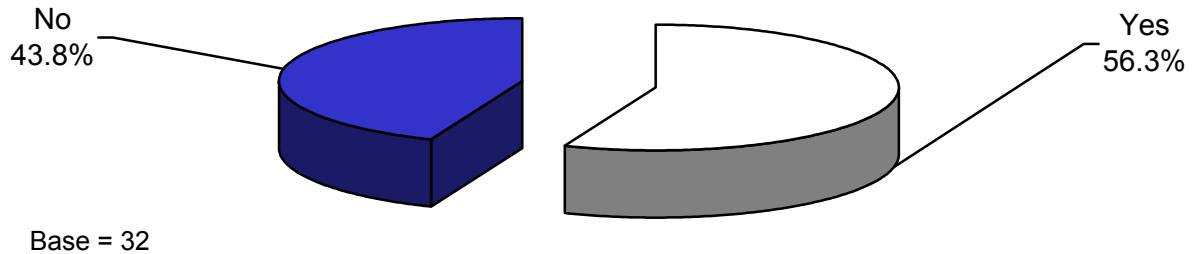
Base = 22

- **Additional comments:**
- 140zw Dip.

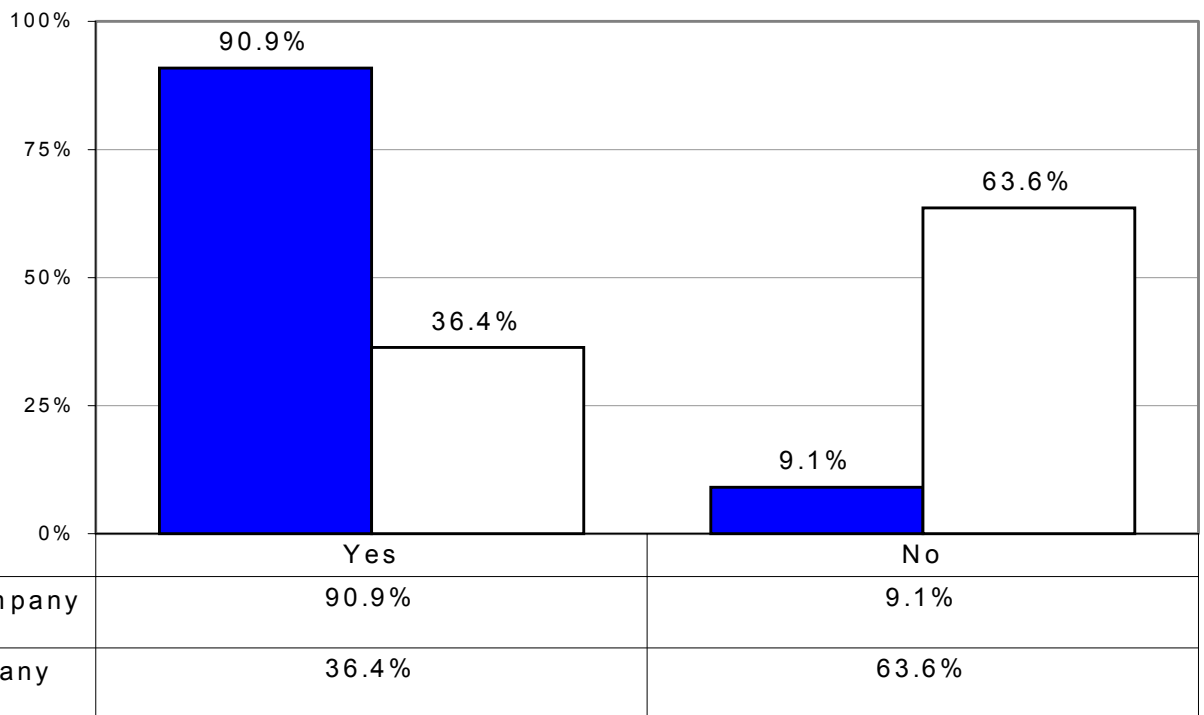
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3) Do you have a chemical coater for dried in place chrome application?

Have a Chemical Coater for Dried in Place Chrome Application - Overall



Have a Chemical Coater for Dried in Place Chrome Application by Size of Company



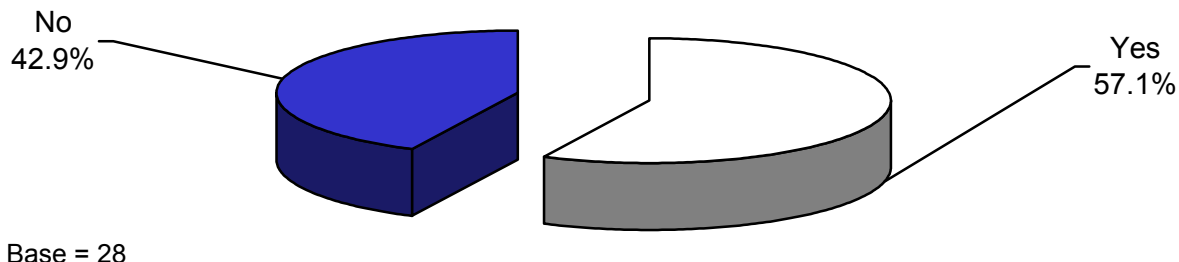
Base = 22

- **Additional comments: (2 responses)**
- Utilize normal coater room. (2 responses)

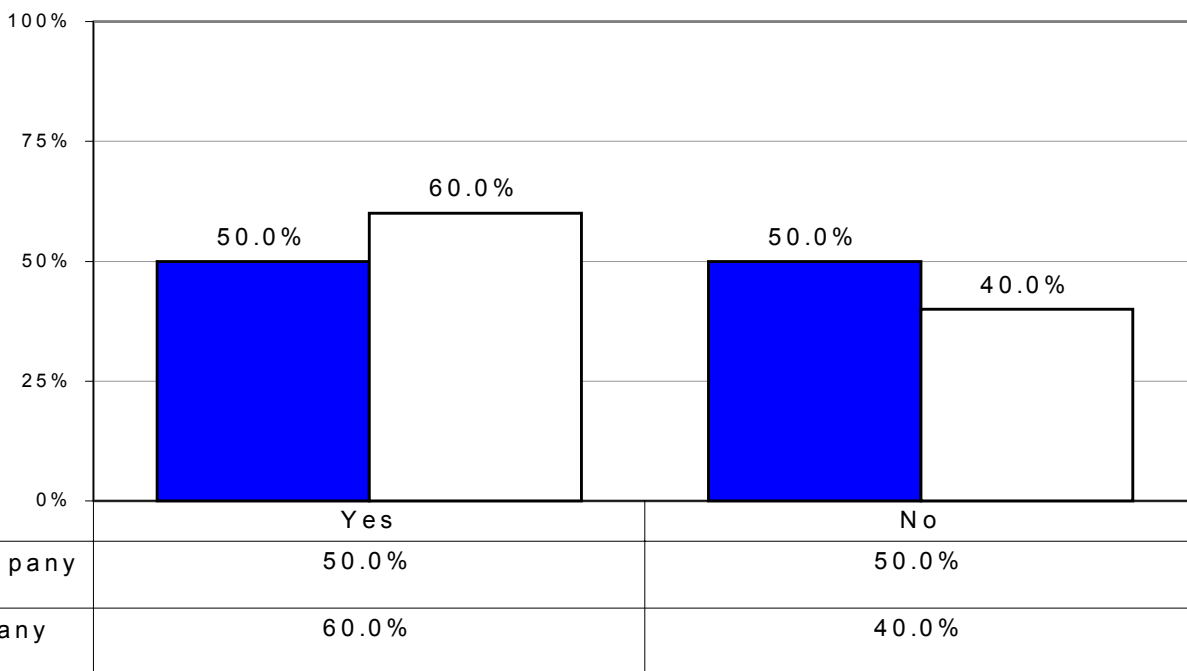
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4) If yes to either #2 or #3, do you have any industrial hygiene data for workers exposure for either hexavalent chrome or hexavalent chrome compounds?

Have Industrial Hygiene Data for Workers Exposure - Overall



Have any Industrial Hygiene Data for Workers Exposure to either Hexavalent Chrome or Hexavalent Chrome Compounds



Base = 20

• **Additional comments: (3 responses)**

- I cannot fax confidential information on employee testing.
- Surveys have been performed by industrial hygienists associated with our workers' compensation insurer and none have ever felt the need to sample.
- We have data suggesting there is no employee exposure to chrome, but we do not share employee exposure information.

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5) If yes, faxed data to Robert Mead.

6) How many employees are exposed to chrome in pretreatment section?

Statistics	Overall	Companies with Less than 500 Employees	Companies with More than 500 Employees
Mean	11	6	7
Median	6	7	6
Lowest/Minimum	0	0	0
Highest/Maximum	79	12	16
Base	27	10	9

- **Additional comments: (8 responses)**

- Four Lab Technicians. (2 responses)
- Environmental Specialist, Supervisors, Maintenance and Line Helpers.
- No employee works in the pre-treatment section. One or two may walk by occasionally.
- Treatment Operators, Lab Techs and Supervisors.
- We do not consider any employees "exposed" to liquid, or respiration of vapor fume or mist.
- We have data suggesting there is not exposure to hexavalent chrome.
- Zero on a daily basis. Lab Technician is exposed, but not on a daily basis.

7) Do you have hexavalent chrome in any of your paints (primer and/or topcoats)?

Statistics	Overall	Companies with Less than 500 Employees	Companies with More than 500 Employees
Yes	74.2%	81.8%	70.0%
No	25.8%	18.2%	30.0%
Base	31	11	10

- **Additional comments: (5 responses)**

- Certain yellow polyester primers.
- One to two primers only.
- SARA Tier II does not report hexavalent chrome (approx 500 lbs 2002).
- There is hexavalent chrome in some of our industrial coatings, but not in paint.
- Waterbase primers.

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8) If yes to #7, do you have any industrial hygiene data for workers exposure for either hexavalent chrome or hexavalent chrome compounds?

Statistics	Overall	Companies with Less than 500 Employees	Companies with More than 500 Employees
Yes	21.7%	11.1%	28.6%
No	78.3%	88.9%	71.4%
Base	23	9	7

- **Additional comments: (3 responses)**

- Confidential.
- Only MSDS.
- Surveys have been performed by industrial hygienists associated with our workers' compensation. Our insurer and none of us have ever felt the need to sample.

9) If yes, please fax data to Robert Mead.

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10) How many employees are exposed to chrome in the painting section?

Statistics	Overall	Companies with Less than 500 Employees	Companies with More than 500 Employees
Mean	7	2	10
Median	3	2	6
Lowest/Minimum	0	0	0
Highest/Maximum	32	4	32
Base	25	6	9

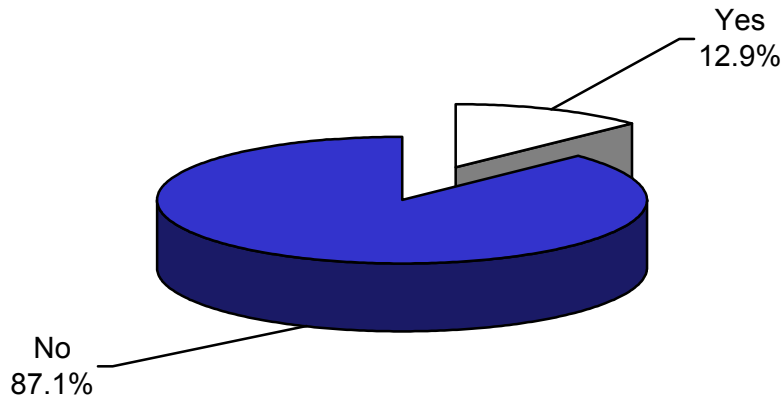
- **Additional comments: (7 responses)**

- The actual number of employees who work with this material depends on who assisted the coater operator set-up and cleanup. The maximum number would be 12 (i.e., the number of employees who work with Epoxy Chromate Backer # 1416h03 and # 7104h03 in liquid form). The ingredient listed on MSDS is Strontium Chromate at 1-<5%.
- Coater.
- Coater Operators, Crew Chiefs and Supervisors.
- Limited to one to two employees when running primers.
- Possibly 32 - spanning all four shifts.
- Two coater operators per shift.
- We do not consider any employees "exposed" to contact with liquid or respiration of vapor fume or mist.

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11) Do you have any job description that includes exposure to hexavalent chrome?

Have Job Descriptions that Includes Exposure to Hexavalent Chrome - Overall



Base = 31

- **Additional comments: (2 responses)**

- None, other than paintline.
- We do not spell out hexavalent chrome in job descriptions, but it is mentioned in hazardous materials training.

12) If yes, list job titles:

- Coater Operator.
- Production Operators 2,3,4,5 and Maintenance Technician - it also includes waste treatment.
- Quality Control, Wastewater and Coaters. The job description itself does not list Hex. Chrome. However, if it did, it should target the above referenced.
- Waste Water Treatment Operator.

Appendix: Questionnaire

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Question #	Question	Response
1	How many employees work at this site or are part of all coil coating activities associated with this company?	
2	Do you use hexavalent chrome in your pretreatment section?	
3	Do you have a chemical coater for dried in place chrome application?	
4	If yes to either #2 or #3 do you have	
5	If yes, please fax data to Robert Mead @ 773-254-7378 or email to rmead@precoat.com	
6	How many employees are exposed to chrome in the pretreatment section?	
7	Do you have hexavalent chrome in any of your paints (primer and/or topcoats)?	
8	If yes to #7 do you have any industrial hygiene data for workers exposure for either hexavalent chrome or hexavalent chrome compounds?	
9	If yes, please fax data to Robert Mead @ 773-254-7378 or email to rmead@precoat.com	
10	How many employees are exposed to chrome in the painting section?	
11	Do you have any job description that includes exposure to hexavalent chrome?	
12	If yes, list job titles	