



Ventura County
Air Pollution
Control District

ANNUAL COMPLIANCE CERTIFICATION SIGNATURE COVER FORM

00385

A copy of each Annual Compliance Certification shall be submitted to EPA, Region 9, at the following address:

Mr. Gerardo Rios, Chief
Permits Office (AIR-3)
Office of Air Division
EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Confidentiality

All information in a Part 70 permit compliance certification is public information. The Part 70 permit is also public information.

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this compliance certification are true, accurate, and complete.

Signature and Title of Responsible Official:  Title: President	Date: 
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Time Period Covered by Compliance Certification <u>10</u> / <u>01</u> / <u>2015</u> (MM/DD/YY) to <u>09</u> / <u>30</u> / <u>2015</u> (MM/DD/YY)



ANNUAL COMPLIANCE CERTIFICATION PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 10 / 1 / 2014 (MM/DD/YY) to 9 / 30 / 2015 (MM/DD/YY)

<p>A. Attachment # or Permit Condition #: Att. No. 71.2.N.3, Rules 71.2.B.4, 71.2.C.1, 71.2.D</p>	<p>D. Frequency of monitoring: Annually</p>
<p>B. Description: External floating roof crude oil storage tank ≥ 40,000 gallons Rules 71.2.B.4, 71.2.C.1, 71.2.D, 71.2.E</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Rule 71.2 Inspection</p>
<p>C. Method of monitoring: Primary and secondary seals were inspected 5/12/2015.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No. 71.4N1, Rules 71.4.B.2, 71.4.C.2</p>	<p>D. Frequency of monitoring: Quarterly</p>
<p>B. Description: Sumps, pits, and ponds with covers. Fugitive emissions monitoring and integrity of cover.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable EPA Method 21</p>
<p>C. Method of monitoring: Quarterly fugitive emissions (Rule 74.10) inspections were conducted on 10/8/2014, 1/29/2015, 5/21/2015, and 7/22/2015. The integrity of the cover has been verified.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No. 74.9N3, Rule 74.9.B.1 and B.2</p>	<p>D. Frequency of monitoring: Quarterly</p>
<p>B. Description: Stationary natural gas-fired rich-burn internal combustion engine quarterly inspections and biennial source test.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable CARB Method 100</p>
<p>C. Method of monitoring: Quarterly inspections were conducted using CARB Method 100 emissions test protocol. Quarterly monitoring was performed on 11/21/2014, 3/10/2015, and 9/21/2015. The biennial source test was conducted on 4/17/2015.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



ANNUAL COMPLIANCE CERTIFICATION PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 10 / 1 / 2014 (MM/DD/YY) to 9 / 30 / 2015 (MM/DD/YY)

<p>A. Attachment # or Permit Condition #: Attachments No. P00385PC1, Cond. No. 1, Rule 29</p> <p>B. Description: Monthly records of throughput at tanks and facility fuel consumption.</p>	<p>D. Frequency of monitoring: Monthly</p> <p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Weekly log sheets compiled by operations, reviewed monthly to verify 10,500,000 BBL annual limit on 80,000 BBLs tank, and combined fuel use limit of 86.6 MMCF/yr for two Enterprise Natural Gas-Fired Rich Burn engines.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u></p> <p>G. Compliance Status? (C or I): <u>C</u></p> <p>H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>
<p>A. Attachment # or Permit Condition #: Attachments No. P00385PC1, Cond. No. 2, Rule 29</p> <p>B. Description: Combustion equipment shall burn only natural gas.</p>	<p>D. Frequency of monitoring: Quarterly</p> <p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Verification of equipment set-up at quarterly testing; verification of fuel use log. PUC natural gas is the only fuel source physically available for the operation of these engines.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u></p> <p>G. Compliance Status? (C or I): <u>C</u></p> <p>H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>
<p>A. Attachment # or Permit Condition #: Attachments No. P00385PC1, Cond. No. 3, Rule 29</p> <p>B. Description: Records of solvent use for cleaning activities shall be maintained.</p>	<p>D. Frequency of monitoring: Monthly</p> <p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Facility monthly record keeping and review of non-exempt solvent use for wipe cleaning. No solvent use during reporting period.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u></p> <p>G. Compliance Status? (C or I): <u>C</u></p> <p>H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



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Period Covered by Compliance Certification: 10 / 1 / 2014 (MM/DD/YY) to 9 / 30 / 2015 (MM/DD/YY)

<p>A. Attachment # or Permit Condition #: Attachment No. 50, Rule 50</p>	<p>D. Frequency of monitoring: Weekly</p>
<p>B. Description: Opacity observations at the facility.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable EPA Method 9</p>
<p>C. Method of monitoring: Opacity surveillance and visual inspections of emissions are conducted weekly at the facility. A sample of the formal survey logs are attached.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No. 74.10, Rule 74.10</p>	<p>D. Frequency of monitoring: Quarterly</p>
<p>B. Description: Leaking component inspections at crude oil and natural gas production and processing facilities.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable EPA Method 21</p>
<p>C. Method of monitoring: Quarterly inspections of all components for fugitive emissions were conducted and reported on 10/8/2014, 1/29/2015, 5/21/2015, and 7/22/2015 by Avanti Environmental. Annual inspection of pressure relief valves. Daily inspections conducted and logged. The Operator Management Plan will be updated by January 30th of each year, if necessary.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No. 74.22, Rule 74.22</p>	<p>D. Frequency of monitoring: Annual</p>
<p>B. Description: Requirements for natural gas-fired, fan-type central furnaces.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Annual review of facilities by management confirms that facility does not have equipment subject to this regulation.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



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Period Covered by Compliance Certification: 10 / 1 / 2014 (MM/DD/YY) to 9 / 30 / 2015 (MM/DD/YY)

<p>A. Attachment # or Permit Condition #: Attachment No. 74.4.D, Rule 74.4.D</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Use of cutback asphalts - road oils.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Annual review of facility and compliance certifications. No use of asphalt products occurred for this period.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>
<p>A. Attachment # or Permit Condition #: Attachment No. 54.B.1, Rule 54.B.1</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Sulfur emissions from Combustion operations at point of discharge; follow monitoring requirements under Rule 64.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Facility follows monitoring requirements under Rule 64. Only PUC-grade natural gas is combusted at the facility. No additional periodic monitoring is required.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>
<p>A. Attachment # or Permit Condition #: Attachment No. 54.B.2, Rule 54.B.2</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Sulfur dioxide concentration at ground level.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Only PUC-grade natural gas is combusted at this facility.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



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<p>A. Attachment # or Permit Condition #: Attachment 57.1, Rule 57.1</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Particulate matter emissions from fuel burning equipment.</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable District Analysis dated December 3, 1997.</p>
<p>C. Method of monitoring: The facility is in compliance based on Rule 57.B District Analysis dated December 3, 1997.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>
<p>A. Attachment # or Permit Condition #: Attachment No. 64.B.1, Rules 64.B.1, 54</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Sulfur content of fuels - gaseous fuel requirements</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Only PUC-grade natural gas is combusted at this facility. No periodic monitoring is required.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>
<p>A. Attachment # or Permit Condition #: Attachment No 74.6, Rule 74.6</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Solvent cleaning activities</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Facility monthly record keeping and review of non-exempt (non-acetone) solvent use for wipe cleaning of tank hatch seals. The solvent use during the reporting period was zero gallons.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



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Period Covered by Compliance Certification: 10 / 1 / 2014 (MM/DD/YY) to 9 / 30 / 2015 (MM/DD/YY)

<p>A. Attachment # or Permit Condition #: Attachment No 74.1, Rule 74.1</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Abrasive blasting</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: The facility did not conduct any abrasive blasting activities during the covered period.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No 74.2, Rule 74.1</p>	<p>D. Frequency of monitoring: Monthly</p>
<p>B. Description: Architectural coatings</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: Documentation of VOC content and usage of architectural coatings is maintained for the facility and updated monthly. The following architectural coatings were used during the compliance period: Fiberlock: 2 gallons @ 0.7 lbs. VOC/gallon = 1.4 lbs. VOC Amerlock: 0.5 gallon @ 1.5 lbs. VOC/gallon = 0.75 lbs. VOC Amershield: 2 gallons @ 2.2 lbs. VOC/gallon = 4.4 lbs. VOC The total amount of VOCs used is 6.55 lbs.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No. 74.26, Rule 74.26</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Crude oil storage tank degassing operations</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: No crude oil storage tank degassing activities were conducted at this facility during the covered period.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



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<p>A. Attachment # or Permit Condition #: Attachment No. 74.29N3, Rule 74.29</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Soil Decontamination Operation</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: No soil decontamination activities were conducted at this facility during the covered time period.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: 40 CFR 61.M</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: National emission standards for asbestos</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: No asbestos removal, renovation, or demolition activities were conducted at this facility during the covered period.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #: Attachment No. 74.11.1</p>	<p>D. Frequency of monitoring: N/A</p>
<p>B. Description: Large water heaters and small boilers</p>	<p>E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable N/A</p>
<p>C. Method of monitoring: The facility is not equipped with large water heaters or small boilers.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u> G. Compliance Status? (C or I): <u>C</u> H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>



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Period Covered by Compliance Certification: 10 / 1 / 2014 (MM/DD/YY) to 9 / 30 / 2015 (MM/DD/YY)

<p>A. Attachment # or Permit Condition #: Attachment 55, Rule 55</p>	<p>D. Frequency of monitoring: Intermittent.</p>
<p>B. Description: Fugitive Dust.</p>	<p>E. Source test reference method, if applicable Attach Source Test Summary Form, if applicable EPA Method 9.</p>
<p>C. Method of monitoring: All applicable sources of dust at this stationary source are operating in compliance with Rule 55.</p>	<p>F. Currently in Compliance? (Y or N): <u>Y</u></p> <p>G. Compliance Status? (C or I): <u>C</u></p> <p>H. *Excursions, exceedances, or other non-compliance? (Y or N): <u>N</u> *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #:</p>	<p>D. Frequency of monitoring:</p>
<p>B. Description:</p>	<p>E. Source test reference method, if applicable Attach Source Test Summary Form, if applicable</p>
<p>C. Method of monitoring:</p>	<p>F. Currently in Compliance? (Y or N): _____</p> <p>G. Compliance Status? (C or I): _____</p> <p>H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form</p>

<p>A. Attachment # or Permit Condition #:</p>	<p>D. Frequency of monitoring:</p>
<p>B. Description:</p>	<p>E. Source test reference method, if applicable Attach Source Test Summary Form, if applicable</p>
<p>C. Method of monitoring:</p>	<p>F. Currently in Compliance? (Y or N): _____</p> <p>G. Compliance Status? (C or I): _____</p> <p>H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form</p>



ANNUAL COMPLIANCE CERTIFICATION SOURCE TEST SUMMARY FORM

Period Covered by Compliance Certification: 10 / 01 / 15 (MM/DD/YY) to 09 / 30 / 15 (MM/DD/YY)

A. Emission Unit Description: G-1			B. Pollutant: CO
C. Measured Emission Rate: 16.2 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 11/21/2014

A. Emission Unit Description: G-1			B. Pollutant: NOx
C. Measured Emission Rate: 3,820 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 11/21/2014

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: CO
C. Measured Emission Rate: 17.2 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 11/21/2014

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: NOx
C. Measured Emission Rate: 4,040 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 11/21/2014

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:



Ventura County
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ANNUAL COMPLIANCE CERTIFICATION SOURCE TEST SUMMARY FORM

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A. Emission Unit Description: G-1			B. Pollutant: CO
C. Measured Emission Rate: 3,502 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 3/10/2015

A. Emission Unit Description: G-1			B. Pollutant: NOx
C. Measured Emission Rate: 6.3 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 3/10/2015

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: CO
C. Measured Emission Rate: 3,429 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 3/10/2015

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: NOx
C. Measured Emission Rate: 16.6 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 3/10/2015

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:



ANNUAL COMPLIANCE CERTIFICATION SOURCE TEST SUMMARY FORM

Period Covered by Compliance Certification: 10 / 01 / 15 (MM/DD/YY) to 09 / 30 / 15 (MM/DD/YY)

A. Emission Unit Description: G-1			B. Pollutant: CO
C. Measured Emission Rate: 3,550 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 4/17/2015

A. Emission Unit Description: G-1			B. Pollutant: NOx
C. Measured Emission Rate: 11.0 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 4/17/2015

A. Emission Unit Description: G-1			B. Pollutant: ROC
C. Measured Emission Rate: 4.5 ppmv @ 15% O2	D. Limited Emission Rate: n/a	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 4/17/2015

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: CO
C. Measured Emission Rate: 3,691 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 4/17/2015

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: NOx
C. Measured Emission Rate: 22.1 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 4/17/2015



ANNUAL COMPLIANCE CERTIFICATION SOURCE TEST SUMMARY FORM

Period Covered by Compliance Certification: 10 / 01 / 15 (MM/DD/YY) to 09 / 30 / 15 (MM/DD/YY)

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: ROC
C. Measured Emission Rate: <0.5 ppmv @ 15% O2	D. Limited Emission Rate: n/a	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 4/17/2015

A. Emission Unit Description: G-1			B. Pollutant: CO
C. Measured Emission Rate: 20.5 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 9/21/2015

A. Emission Unit Description: G-1			B. Pollutant: NOx
C. Measured Emission Rate: 4,205 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 9/21/2015

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: CO
C. Measured Emission Rate: 9.7 ppmv @ 15% O2	D. Limited Emission Rate: 4,500 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 9/21/2015

A. Emission Unit Description: Primary and secondary seals were inspected 5/12/2015.			B. Pollutant: NOx
C. Measured Emission Rate: 4,033 ppmv @ 15% O2	D. Limited Emission Rate: 25 ppmv @ 15% O2	E. Specific Source Test or Monitoring Record Citation: AirX Services	F. Test Date: 9/21/2015

CRIMSON PIPELINE LP

Engine 1440 Hr. Report

Operation Every 1440 Hrs.

Date 9/8/15

APCD PERMIT NUMBER 0385

LOCATION: TORREY SITA

MAKE ENTERPRISE 6-2

MODEL: 656-6

TYPE: NATURAL GAS

INSPECTION ENGINE HOURS 13256

NEXT INSPECTION HOURS DUE: 14696

INSPECTIONS PERFORMED

OIL ANALYSIS SAMPLE- OIL CHANGE & FILTERS

Comment: WATER IN OIL

INSPECT SPARK PLUGS- GOOD

Comment: _____

INSPECT ALL HOSES AND BELTS- GOOD

Comment: _____

MECHANIC 

DATE WORK COMPLETED 9/8/15

CRIMSON PIPELINE LP

Engine 1440 Hr. Report

Operation Every 1440 Hrs.

Date 7/2/15

APCD PERMIT NUMBER 0385

LOCATION: TORREY STA

MAKE ENTERPRISE G-2

MODEL: 656-6

TYPE: NATURAL GAS

INSPECTION ENGINE HOURS 11816

NEXT INSPECTION HOURS DUE: 13256

INSPECTIONS PERFORMED

OIL ANALYSIS SAMPLE- OIL CHANGE & FILTERS

Comment: _____

INSPECT SPARK PLUGS- NEW SPARK PLUGS

Comment: _____

INSPECT ALL HOSES AND BELTS- GOOD

Comment: _____

MECHANIC Jeff

DATE WORK COMPLETED 7/2/15

CRIMSON PIPELINE LP

Engine 1440 Hr. Report

Operation Every 1440 Hrs.

Date 5/7/15

APCD PERMIT NUMBER 0385

LOCATION: TORREY SPA

MAKE ENTERPRISE 6-2

MODEL: GSG-6

TYPE: NATURAL GAS

INSPECTION ENGINE HOURS 10464

NEXT INSPECTION HOURS DUE: 11904

INSPECTIONS PERFORMED

OIL ANALYSIS SAMPLE- GOOD - Normal

Comment: _____

INSPECT SPARK PLUGS- GOOD

Comment: _____

INSPECT ALL HOSES AND BELTS- GOOD

Comment: _____

MECHANIC Joe Johns

DATE WORK COMPLETED 3/7/15

CRIMSON PIPELINE LP

Engine 1440 Hr. Report

Operation Every 1440 Hrs.

Date 2/9/15

APCD PERMIT NUMBER 0385

LOCATION: TORREY STA

MAKE ENTERPRISE 6-2

MODEL: 656-6

TYPE: NATURAL GAS

INSPECTION ENGINE HOURS 9024

NEXT INSPECTION HOURS DUE: 10464

INSPECTIONS PERFORMED

OIL ANALYSIS SAMPLE- 11082800441

Comment: NORMAL

INSPECT SPARK PLUGS- ALL FIREWIRE GOOD

Comment: _____

INSPECT ALL HOSES AND BELTS- ALL IN GOOD SHAP

Comment: _____

MECHANIC [Signature]

DATE WORK COMPLETED 2/9/15

LubeAnalyst

Sample Number : 11082800441
Site Name : CRIMSON PIPELINE/TORREY
Equipment Ref ID : Engine #2
Equipment Description : Enterprise GSG6
Component Ref ID :
Component Description : Engine
Manuf./Model : Enterprise Co/ GSG6
Lubricant Name : Shell Myselia S3 N 40

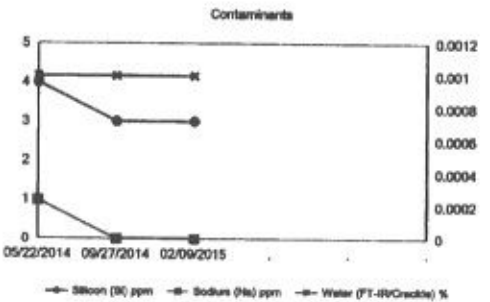
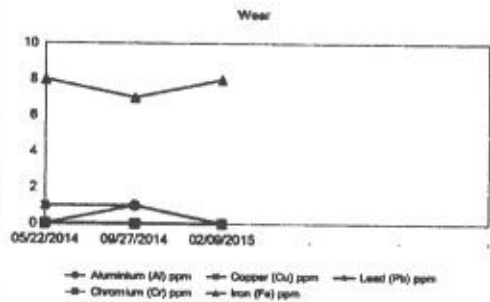
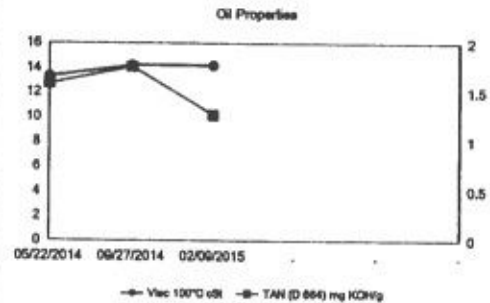
LubeAnalyst Number : 01275408/EGN01
CRIMSON PIPELINE/TORREY
 210 N. 12th ST
 Santa Paula
 California
 93060
 USA

Focal point 1 : LubeAnalyst Customer Service
Shell Website : <http://www.shell-lubeanalyst.shell.com/>

Focal point 1 phone : +18772518313

The Sample test results all indicate that the equipment/vehicle and lubricant are both performing within normal working limits. Please continue normal operation and review again at the next scheduled sample.

Sample Number	12045800800	12045800798	11082800441
Sample Condition	Normal	Normal	Normal
Sample Date	05/22/2014	09/27/2014	02/09/2015
Equipment Life	-	0 Hours	-
Lubricant Life	-	0 Hours	-
Top-up Volume	-	-	-
Oil Drain	No	No	No
Viscosity 100°C			
Visc 100°C cSt	13.3	14.2	14.2
TAN (D 664)			
TAN (D 664) mg KOH/g	1.59	1.76	1.27
TBN (D 4739)			
TBN (D 4739) mg KOH/g	4.77	3.57	3.62
Water (FT-IR/Crackle)			
Water (FT-IR/Crackle) %	<0.1	<0.1	<0.1
FT-IR (Intra-Red) E 2412			
Oxidation (FT-IR) (abs cm ⁻¹)/0.1mm	6.00	9.00	10.00
Nitration (FT-IR) (abs cm ⁻¹)/0.1mm	5.00	7.00	7.00
Spectrometry (Oils)			
Iron (Fe) ppm	8	7	8
Chromium (Cr) ppm	0	0	0
Nickel (Ni) ppm	0	0	0
Aluminium (Al) ppm	0	1	0
Copper (Cu) ppm	1	1	0
Lead (Pb) ppm	0	0	0
Tin (Sn) ppm	0	0	0
Cadmium (Cd) ppm	0	0	0
Silver (Ag) ppm	0	0	0
Titanium (Ti) ppm	0	0	0
Vanadium (V) ppm	0	0	0
Silicon (Si) ppm	4	3	3
Sodium (Na) ppm	1	0	0
Potassium (K) ppm	3	0	0
Molybdenum (Mo) ppm	2	1	2
Antimony (Sb) ppm	0	0	0
Manganese (Mn) ppm	0	0	0
Lithium (Li) ppm	0	0	0
Boron (B) ppm	2	2	11
Magnesium (Mg) ppm	13	9	13
Calcium (Ca) ppm	1321	1447	1625
Barium (Ba) ppm	0	0	0
Phosphorus (P) ppm	309	333	355



CRIMSON PIPELINE LP

Engine 1440 Hr. Report

Operation Every 1440 Hrs.

Date 12/4/14

APCD PERMIT NUMBER 0385

LOCATION: Torrey #2

MAKE ENTERPRISE

MODEL: 656-6

TYPE: NATURAL GAS

INSPECTION ENGINE HOURS 7714

NEXT INSPECTION HOURS DUE: 9154

INSPECTIONS PERFORMED

OIL ANALYSIS SAMPLE- OIL & FILTER CHANGE

Comment: _____

INSPECT SPARK PLUGS- REPAIRED 4 SPARK PLUG WIRES

Comment: _____

INSPECT ALL HOSES AND BELTS- GOOD

Comment: _____

MECHANIC 

DATE WORK COMPLETED 12/4/14

CRIMSON PIPELINE LP
ENGINE SERVICE REPORT

TYPE OF SERVICE Clean

DATE 3/3/15

APCD PERMIT NUMBER 0385

LOCATION Torrey Station

MAKE Enterprise (G-2)

MODEL GSG-6

TYPE Natural Gas

ENGINE HOURS 9481

OPERATIONS PERFORMED

Cleaned Catalytic Converter and also changed
O₂ sensors

MECHANIC 

DATE WORK COMPLETED 3/3/15

CRIMSON PIPELINE LP
ENGINE SERVICE REPORT

TYPE OF SERVICE _____

DATE 5/25/15

APCD PERMIT NUMBER 0385

LOCATION Torrey Station

MAKE Enterprise (G-2)

MODEL GSG-6

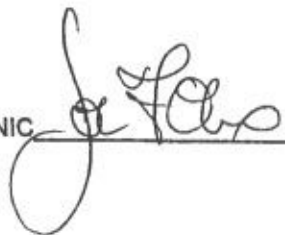
TYPE Natural Gas

ENGINE HOURS 11196

OPERATIONS PERFORMED

CHANGED Air Filters & O₂ Sensors

MECHANIC _____



DATE WORK COMPLETED 5/25/15

CRIMSON PIPELINE LP
ENGINE SERVICE REPORT

TYPE OF SERVICE _____

DATE 8/27/15

APCD PERMIT NUMBER 0385

LOCATION Torrey Station

MAKE Enterprise (G-2)

MODEL GSG-6

TYPE Natural Gas

ENGINE HOURS 12991

OPERATIONS PERFORMED

CHANGED AIR CLEANERS, O2 SENSOR AND
REPLACED SPARK PLUG WIRES ON NUMBER 1, 4, 5
CYLINDERS

MECHANIC 

DATE WORK COMPLETED 8/27/15

TORREY STATION ENGINE DATA SHEET
ENTERPRISE G-2

ENGINE TIMER: START 7888 FINISH 8006 TOTAL HOURS _____
 OUTGOING BBLs. START _____
 INCOMING BBLs. START _____

INITIALS	JO	CS			CS		
DATE	12/15	12/16			12/19		
DAY	MON	TUES	WED	THUR	FRI	SAT	SUN
DISCHARGE PRESSURE	333	528			528		
SUCTION PRESSURE	12.8	13.6			13.0		
OXY. OUTPUT (mv) FRONT	12.0	12.0			12.0		
OXY. OUTPUT (mv) BACK	14.0	14.0			14.0		
MAKE-UP TANK LEVEL	Full	Full			Full		
LUBE OIL LEVEL	5/8	5/8			5/8		
OIL ADDED TO ENGINE	15 GAL	—			10 GAL		
AIR PRESSURE	190	190			190		
CONVERTER TEMP TC-1	803	790			818		
CONVERTER TEMP TC-2	786	780			804		
FRONT AIR/FUEL PRESSURE	+2.0	+2.0			+2.0		
REAR AIR/FUEL PRESSURE	+2.0	+2.0			+2.0		
ENGINE RPM'S	349	346			352		
CYLINDER #1	1001	992			1004		
CYLINDER #2	957	962			965		
CYLINDER #3	959	950			957		
CYLINDER #4	975	962			972		
CYLINDER #5	474	961			971		
CYLINDER #6	975	966			980		
ENGINE WATER PRESSURE	9	8			10 7		
ENGINE WATER TEMP.	150	140			140		
ENGINE OIL PRESSURE	39	39			39		
ENGINE OIL TEMP.	160	150			150		
GEAR BOX OIL PRESSURE	22	30			32		
INBOARD BEARING TEMP.	105	100			100		
OUTBOARD BEARING TEMP.	130	120			120		

TORREY STATION ENGINE DATA SHEET
ENTERPRISE G-1

ENGINE TIMER: START 17695 FINISH 17695 TOTAL HOURS _____
 OUTGOING BBLs. START _____
 INCOMING BBLs. START _____

INITIALS	JD	CS			CS		
DATE	12/15	12/16			12/19		
DAY	MON	TUES	WED	THUR	FRI	SAT	SUN
DISCHARGE PRESSURE							
SUCTION PRESSURE							
OXY. OUTPUT (mv) FRONT							
OXY. OUTPUT (mv) BACK							
MAKE-UP TANK LEVEL							
LUBE OIL LEVEL							
OIL ADDED TO ENGINE							
AIR PRESSURE							
CONVERTER TEMP TC-1							
CONVERTER TEMP TC-2							
FRONT AIR/FUEL PRESSURE							
REAR AIR/FUEL PRESSURE							
ENGINE RPM'S							
CYLINDER #1							
CYLINDER #2							
CYLINDER #3	D	D			D		
CYLINDER #4	O	O			O		
CYLINDER #5	U	W			W		
CYLINDER #6	N	N			N		
ENGINE WATER PRESSURE							
ENGINE WATER TEMP.							
ENGINE OIL PRESSURE							
ENGINE OIL TEMP.							
GEAR BOX OIL PRESSURE							
INBOARD BEARING TEMP.							
OUTBOARD BEARING TEMP.							

TORREY STATION ENGINE DATA SHEET
ENTERPRISE G-1

ENGINE TIMER: START 17694 FINISH 17694 TOTAL HOURS _____
 OUTGOING BBLs. START _____
 INCOMING BBLs. START _____

INITIALS	CS	CS	CS	CS	JD		
DATE	11/10	11/11	11/12	11/13	11/14		
DAY	MON	TUES	WED	THUR	FRI	SAT	SUN
DISCHARGE PRESSURE							
SUCTION PRESSURE							
OXY. OUTPUT (mv) FRONT							
OXY. OUTPUT (mv) BACK							
MAKE-UP TANK LEVEL							
LUBE OIL LEVEL							
OIL ADDED TO ENGINE							
AIR PRESSURE							
CONVERTER TEMP TC-1							
CONVERTER TEMP TC-2							
FRONT AIR/FUEL PRESSURE							
REAR AIR/FUEL PRESSURE							
ENGINE RPM'S							
CYLINDER #1	D	D	D	D	D		
CYLINDER #2	O	O	O	O	O		
CYLINDER #3	W	W	W	W	W		
CYLINDER #4	N	N	N	N	N		
CYLINDER #5							
CYLINDER #6							
ENGINE WATER PRESSURE							
ENGINE WATER TEMP.							
ENGINE OIL PRESSURE							
ENGINE OIL TEMP.							
GEAR BOX OIL PRESSURE							
INBOARD BEARING TEMP.							
OUTBOARD BEARING TEMP.							

TORREY STATION ENGINE DATA SHEET
ENTERPRISE G-2

ENGINE TIMER: START 7087 FINISH 7245 TOTAL HOURS _____
 OUTGOING BBLs. START _____
 INCOMING BBLs. START _____

INITIALS	CS	CS	CS	CS	Jo		
DATE	11/10/14	11/11/14	11/12/14	11/13/14	11/14/14		
DAY	MON	TUES	WED	THUR	FRI	SAT	SUN
DISCHARGE PRESSURE	533	528	527	529	527		
SUCTION PRESSURE	12.8	13.1	13.7	12.4	13.2		
OXY. OUTPUT (mv) FRONT	12.0	12.0	12.0	12.0	12.0		
OXY. OUTPUT (mv) BACK	14.0	14.0	14.0	14.0	14.0		
MAKE-UP TANK LEVEL	Full	Full	Full	Full	Full		
LUBE OIL LEVEL	1/2	1/2	1/2	1/2	1/2		
OIL ADDED TO ENGINE	14 Gall	5 Gall	-	8 Gall	-		
AIR PRESSURE	195	190	190	190	190		
CONVERTER TEMP TC-1	842	817	799	840	840		
CONVERTER TEMP TC-2	827	804	784	830	826		
FRONT AIR/FUEL PRESSURE	+2.0	+2.0	+2.0	+2.0	+2.0		
REAR AIR/FUEL PRESSURE	+1.7	+1.8	+1.5	+1.5	+1.8		
ENGINE RPM'S	356	352	348	359	355		
CYLINDER #1	1004	1004	1009	1009	1005		
CYLINDER #2	965	965	964	977	966		
CYLINDER #3	947	943	942	946	948		
CYLINDER #4	978	971	965	990	977		
CYLINDER #5	983	972	965	989	981		
CYLINDER #6	1006	986	975	1002	1004		
ENGINE WATER PRESSURE	6	8	8	8	8		
ENGINE WATER TEMP.	145	155	150	150	155		
ENGINE OIL PRESSURE	46	36	38	37	38		
ENGINE OIL TEMP.	135	162	160	160	160		
GEAR BOX OIL PRESSURE	30	25	26	29	23		
INBOARD BEARING TEMP.	100	100	100	100	105		
OUTBOARD BEARING TEMP.	120	130	130	130	130		

TORREY STATION ENGINE DATA SHEET
ENTERPRISE G-2

ENGINE TIMER: START 6854 FINISH _____ TOTAL HOURS _____
 OUTGOING BBLs. START _____
 INCOMING BBLs. START _____

INITIALS			CS		JD		
DATE	10/27/14 - 11/3/14		10/29		10/30		
DAY	MON	TUES	WED	THUR	FRI	SAT	SUN
DISCHARGE PRESSURE			533		528		
SUCTION PRESSURE			12.5		14.1		
OXY. OUTPUT (mv) FRONT			12.0		12.0		
OXY. OUTPUT (mv) BACK			14.0		14.0		
MAKE-UP TANK LEVEL			Full		Full		
LUBE OIL LEVEL			1/2		1/2		
OIL ADDED TO ENGINE			146ml		106ml		
AIR PRESSURE			190		190		
CONVERTER TEMP TC-1			857		807		
CONVERTER TEMP TC-2			849		798		
FRONT AIR/FUEL PRESSURE			+2.0		+2.0		
REAR AIR/FUEL PRESSURE			+2.0		+2.0		
ENGINE RPM'S			360		347		
CYLINDER #1			1016		1000		
CYLINDER #2			977		965		
CYLINDER #3			961		954		
CYLINDER #4			1006		985		
CYLINDER #5			1008		981		
CYLINDER #6			1017		975		
ENGINE WATER PRESSURE			10		9		
ENGINE WATER TEMP.			175		150		
ENGINE OIL PRESSURE			34		42		
ENGINE OIL TEMP.			180		165		
GEAR BOX OIL PRESSURE			16		26		
INBOARD BEARING TEMP.			118		105		
OUTBOARD BEARING TEMP.			145		130		

TORREY STATION ENGINE DATA SHEET
ENTERPRISE G-1

ENGINE TIMER: START 17693 FINISH _____ TOTAL HOURS _____
 OUTGOING BBLs. START _____
 INCOMING BBLs. START _____

INITIALS			CS		JD		
DATE	10/27/14 - 11/3/14		10/29		10/31		
DAY	MON	TUES	WED	THUR	FRI	SAT	SUN
DISCHARGE PRESSURE							
SUCTION PRESSURE							
OXY. OUTPUT (mv) FRONT							
OXY. OUTPUT (mv) BACK							
MAKE-UP TANK LEVEL							
LUBE OIL LEVEL							
OIL ADDED TO ENGINE							
AIR PRESSURE							
CONVERTER TEMP TC-1							
CONVERTER TEMP TC-2							
FRONT AIR/FUEL PRESSURE							
REAR AIR/FUEL PRESSURE							
ENGINE RPM'S							
CYLINDER #1			D				
CYLINDER #2			O		D		
CYLINDER #3			W		O		
CYLINDER #4			A		W		
CYLINDER #5					W		
CYLINDER #6					A		
ENGINE WATER PRESSURE							
ENGINE WATER TEMP.							
ENGINE OIL PRESSURE							
ENGINE OIL TEMP.							
GEAR BOX OIL PRESSURE							
INBOARD BEARING TEMP.							
OUTBOARD BEARING TEMP.							

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
RULE 71.2 INSPECTION REPORT

PLEASE COMPLETE FORM LEGIBLY IN BLACK INK

Created by Beacon Energy Services, Inc.

Tank No. 80702 Permit No. OO387 Inspection Date 5/12/2015 Time 3:30pm
Is this a Follow-up Inspection? Yes No If yes, Date of Previous Inspection: _____

A. COMPANY INFORMATION:

Company Name Crimson Pipeline L.P.
Location Address Torrey Canyon Road City Piru Zip _____
Mailing Address 210 North 12th Street City Santa Paula Zip 93060
Contact Person Greg Fussel Title Supervisor
Phone 805-223-6850

B. INSPECTION CONDUCTED BY:

Name Matt Story Title Inspector
Company Name Beacon Energy Services, Inc. Phone 562-997-3087
Mailing Address 2675 Junipero ave. Suite 600 City Signal Hill Zip 90755

C. TANK INFORMATION:

Capacity 80,000bbls Installation Date _____ Diameter 110' Ht. 48'
Product Type Crude Product RVP _____
Type of Tank Riveted Welded Other (Describe) _____
Color of Shell White Color of Roof White
Roof Type Pontoon Double Deck Other (Describe) _____
 External floating roof Internal floating roof

D. GROUND LEVEL INSPECTION:

1) Product Temperature 72 Degrees F Product Level 9' - 4"
3) List type and location of leaks found in tank shell. No leaks found in shell

E. INTERNAL FLOATING ROOF TANK:

NA 1) Check vapor space between floating roof and fixed roof with explosimeter. _____ % LEL
2) Conduct visual inspection of roofs and secondary seals, if applicable.
3) Are all roof openings covered? No Yes
If no, explain in comments section (J) and proceed to part (H)(6)

F. EXTERNAL FLOATING ROOF TANK:

1) On the diagram (attached) indicate the location of the ladder, roof drain(s), anti-rotation device(s), platform, gauge well, vents or other appurtenances. Note information relative to North (to the top of the worksheet)
2) Identify any tears in the seal fabric. Describe and indicate on diagram (attached)
No tears found in seal fabric
3) If this is an In-Service External Floating seal inspection, record the LEL% reading within 3 feet of the seal LEL 0%

**VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
RULE 71.2 INSPECTION REPORT**

Tank No. 80702 Permit No. 00387

G. FROM GAUGER PLATFORM:

1) Observe the entire floating roof:

Is the roof badly warped or buckled? No Yes NA

Is there any obvious damage? No Yes NA

2) Are there liquid hydrocarbons on the roof? No Yes NA

3) Is there water ponding on the roof? No Yes NA

Occasionally pools of water are usually a result of inadequate slope for damage or from a leaky geodesic dome roof. These do not become a hazard unless the roof drain system is not flowing freely or unless the water covers over half the roof.

4) For an External Floating Roof, is the bonding cable at the top of the rolling ladder in deteriorated condition? No Yes NA

H. SEAL INSPECTION:

1) Secondary Seal Inspection

a) Type of Secondary Seal: Single Wiper

b) Does 1/2" probe drop past seal? No Yes If yes, measure length(s) and show on diagram

c) Does 1/8" probe drop past seal? No Yes If yes, measure length(s) and show on diagram

d) Record dimensions for gaps > 1/8" 2' - 8" >1/2" 0

**NOTE: Record the actual width and cumulative length of gaps in feet and inches. Do not include >1/8" gaps in 1/2" measures*

2) Primary Seal Inspection

a) Type of Primary Seal: Shoe Tube Other

b) (shoe seal) does 1-1/2" probe drop past seal? No Yes If yes, measure length(s) and show on diagram

c) (shoe seal) does 1/2" probe drop past seal? No Yes If yes, measure length(s) and show on diagram

d) (tube seal) does 1/2" probe drop past seal? No Yes If yes, measure length(s) and show on diagram

e) (all seal types) does 1/8" probe drop past seal? No Yes If yes, measure length(s) and show on diagram

f) Record dimensions of gaps for gaps > 1/8" 0 >1/2" 0 >1-1/2" 0

**NOTE: Record the actual width and cumulative length of gaps in feet and inches. Do not include 1/8" 1/2" gaps in 1-1/2 measurements*

**NOTE: Record the actual width and cumulative length of gaps in feet and inches. Do not include >1/8" gaps in 1/2" measures*

**VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
RULE 71.2 INSPECTION REPORT**

Tank No. 80702 Permit No. OO387

I. CALCULATIONS - Complete all applicable portions of the following:

Gaps in <u>Primary Seal</u> between 1/8" and 1/2"	<u>0</u>	(feet)	<u>0</u>	(Inches)
Gaps in <u>Primary Seal</u> between 1/2" and 1-1/2"	<u>0</u>	(feet)	<u>0</u>	(Inches)
Gaps in <u>Primary Seal</u> greater than 1-1/2"	<u>0</u>	(feet)	<u>0</u>	(Inches)
Gaps in <u>Secondary Seal</u> between 1/8" and 1/2"	<u>2</u>	(feet)	<u>8</u>	(Inches)
Gaps in <u>Secondary Seal</u> > 1/2"	<u>0</u>	(feet)	<u>0</u>	(Inches)

Multiply diameter (ft) of tank to determine appropriate gap limits:

5% Circumference = Diameter X 0.157 =	<u>17.27</u>	60% Circ. = Diameter X 1.88 =	<u>206.8</u>
10% Circumference = Diameter X 0.314 =	<u>34.54</u>	90% Circ. = Diameter X 2.83 =	<u>311.3</u>
30% Circumference = Diameter X 0.942 =	<u>103.62</u>	95% Circ = Diameter X 2.98 =	<u>327.8</u>

J. DETERMINE COMPLIANCE STATUS OF TANK:

- 1) Were any openings found on the roof? No Yes
- 2) Were any tears in the seals found? No Yes
- 3) Is the product level lower than the level at which the roof would be floating? No Yes
- 4) Secondary Seal:**
- Did 1/2" probe drop between the shell and seal? No Yes
- Did cumulative 1/8" - 1/2" gap exceed 5% of the tank circumference length? No Yes
- 5) Primary Seal:**
- Shoe Did 1-1/2" probe drop between the shell and seal? No Yes
- Did cumulative 1/2" - 1-1/2" gap exceed 10% circumference length? No Yes
- Did cumulative 1/8" - 1/2" gap exceed 40% circumference length? No Yes
- Did any single continuous 1/8" - 1-1/2" gap exceed 10% circumference length? No Yes
- Tube Did 1/2" probe drop between the shell and seal? No Yes NA
- Did cumulative 1/8" - 1/2" gap exceed 95% circumference length? No Yes NA

If "yes" is checked for any of the above items the tank is Out of Compliance

- 7) Does tank have permit conditions? No Yes
- Does tank comply with these conditions? No Yes

1 IF INSPECTION WAS TERMINATED PRIOR TO COMPLETION FOR ANY REASON, PLEASE EXPLAIN

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
RULE 71.2 INSPECTION REPORT


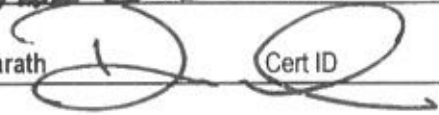
Tank No. 80702 Permit No. 00387

K. **COMMENTS:**

Use this section to complete answers to above listed items and to describe repairs made to the tank; include date and time repairs were made.

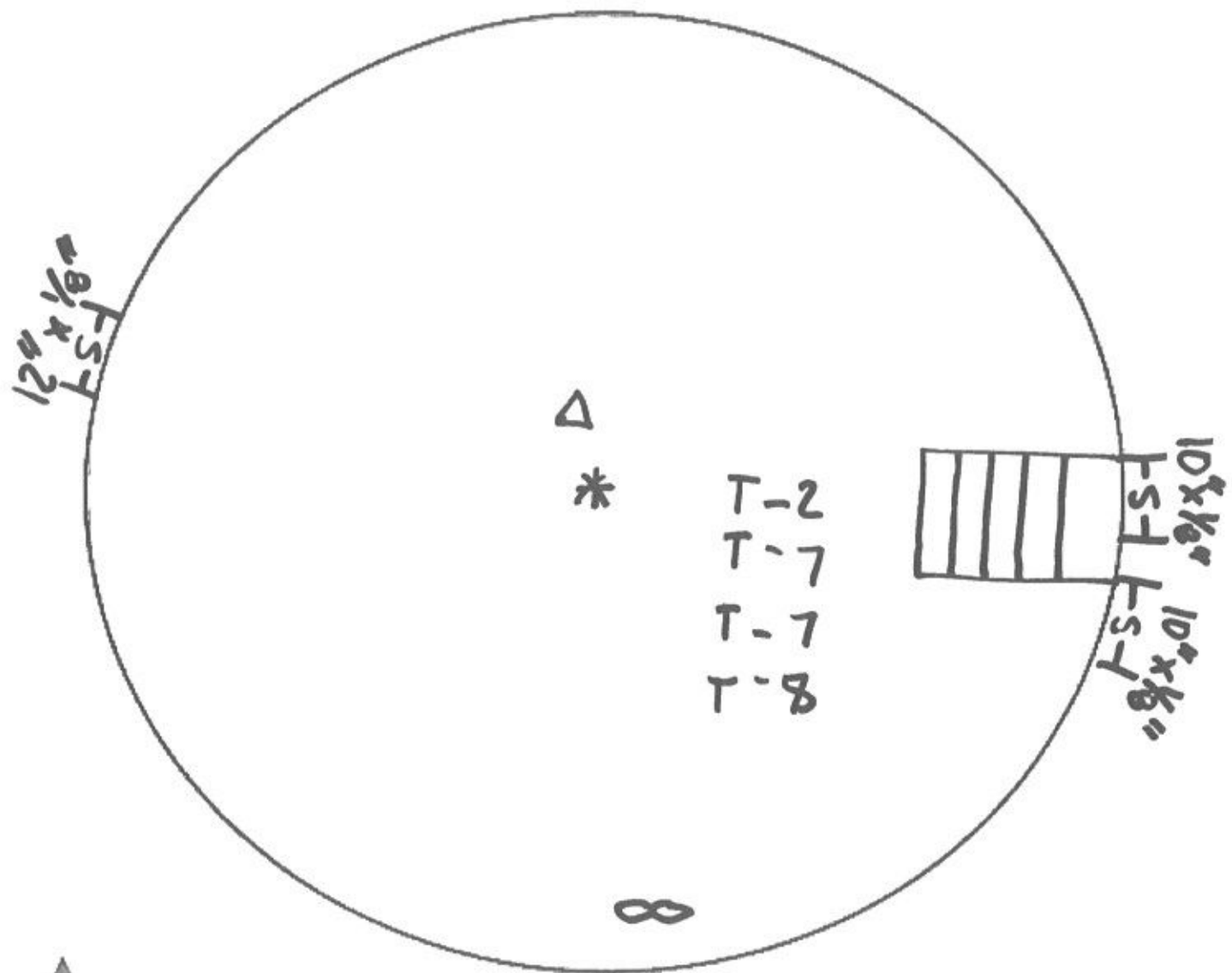
TANK IS IN COMPLIANCE AT THIS TIME

L. I (We) certify the foregoing information to be correct to the best of my (Our) knowledge.

Inspection completed by	<u>Matt Story</u>		Cert ID	<u>MS003</u>	Date	<u>5/12/2015</u>
<i>signature</i>						
Compliance status by	<u>Robert Hoppenrath</u>		Cert ID	<u>RH003</u>	Date	<u>5/12/2015</u>
<i>signature</i>						
Company Representative			Cert ID		Date	
<i>signature</i>						

A copy of this Inspection Report must be provided to the Ventura County APCD within 30 Calendar days after the inspection date. A copy of this report must be kept on-site and made available to Ventura County APCD upon request for a period of 4 Years.

Number 80702 Location Torrey



North * ALL GAPS ARE 1/8" UNLESS OTHERWISE NOTED

Equipment:

- Anti-Rotation Device
- Ladder
- Gauge Well
- Leg Stand
- Roof Drain
- Emergency Roof Drain
- Vacuum Breaker
- Vent

Defects:

- Leg Top
- Leg Pin
- Open Hatch
- Torn Seal
- Primary Seal Gap
- Secondary Seal Gap

Company Crimson Pipeline, LP
 Facility Torrey Pump Station
 Torrey Canyon Road, 0.5 Miles South of Guiberson Road, Piru, CA

District ID 00385
 Contact David Blakeslee

Component Group	Accessible	Inaccessible	Leaks	Percentage
Stuffing Box	0	0	0	0
Threaded Component	0	0	0	0
Valve	3	0	0	0
Flange	0	0	0	0
Compressor	0	0	0	0
Pump	0	0	0	0
Atmospheric PRD	0	0	0	0
Other	2	0	0	0

**No Reportable Leaks for this Quarter
 Inspected on 10/08/2014**

Company Crimson Pipeline, LP
Facility Torrey Pump Station
Torrey Canyon Road, 0.5 Miles South of Guiberson Road, Piru, CA

District ID 00385
Contact David Blakeslee

Component Group	Accessible	Inaccessible	Leaks	Percentage
Stuffing Box	0	0	0	0
Threaded Component	0	0	0	0
Valve	3	0	0	0
Flange	0	0	0	0
Compressor	0	0	0	0
Pump	0	0	0	0
Atmospheric PRD	0	0	0	0
Other	2	0	0	0

**No Reportable Leaks for this Quarter
Inspected on 01/29/2015**

Company Crimson Pipeline, LP
Facility Torrey Pump Station
 Torrey Canyon Road, 0.5 Miles South of Guiberson Road, Piru, CA

District ID 00385
Contact David Blakeslee

Component Group	Accessible	Inaccessible	Leaks	Percentage
Stuffing Box	0	0	0	0
Threaded Component	0	0	0	0
Valve	3	0	0	0
Flange	0	0	0	0
Compressor	0	0	0	0
Pump	0	0	0	0
Atmospheric PRD	0	0	0	0
Other	2	0	0	0

**No Reportable Leaks for this Quarter
 Inspected on 05/21/2015**

Company Crimson Pipeline, LP
Facility Torrey Pump Station
Torrey Canyon Road, 0.5 Miles South of Guiberson Road, Piru, CA

District ID 00385
Contact Brad Seeley
(562) 285-4113

Component Group	Accessible	Inaccessible	Leaks	Percentage
Stuffing Box	0	0	0	0
Threaded Component	0	0	0	0
Valve	3	0	0	0
Flange	0	0	0	0
Compressor	0	0	0	0
Pump	0	0	0	0
Atmospheric PRD	0	0	0	0
Other	2	0	0	0

**No Reportable Leaks for this Quarter
Inspected on 07/22/2015**

SUMMARY OF SOURCE TEST RESULTS
Quarterly Emission Testing
Crimson Pipeline
Torrey Pump Station
G-1

11/21/2014

		<i>Allowable</i>
Oxides of Nitrogen (NOx)		
ppmv	55.4	-
ppmv @ 15% O2	16.2	25
Carbon Monoxide (CO)		
ppmv	13037	-
ppmv @ 15% O2	3820	4500
Oxygen (O2), percent	0.8	-
Opacity, %	0.0	10%

SUMMARY OF SOURCE TEST RESULTS
Quarterly Emission Testing
Crimson Pipeline
Torrey Pump Station
G-2

11/21/2014

		<i>Allowable</i>
Oxides of Nitrogen (NOx)		
ppmv	59.0	-
ppmv @ 15% O2	17.2	25
Carbon Monoxide (CO)		
ppmv	13879	-
ppmv @ 15% O2	4040	4500
Oxygen (O2), percent	0.6	-
Opacity, %	0.0	10%

Note: Reported values represent a 20-minute average.



SUMMARY OF SOURCE TEST RESULTS
Quarterly Emission Testing
Crimson Pipeline
Torrey Pump Station
G-2

3/10/2015

		<i>Allowable</i>
Oxides of Nitrogen (NOx)		
ppmv	68.6	-
ppmv @ 15% O2	19.6	25
Carbon Monoxide (CO)		
ppmv	12032	-
ppmv @ 15% O2	3429	4500
Oxygen (O2), percent	0.2	-

Note: Reported values represent a 20-minute average.



SUMMARY OF SOURCE TEST RESULTS
Quarterly Emission Testing
Crimson Pipeline
Torrey Pump Station
G-1

3/10/2015

		<i>Allowable</i>
Oxides of Nitrogen (NOx)		
ppmv	22.2	-
ppmv @ 15% O2	6.3	25
Carbon Monoxide (CO)		
ppmv	12283	-
ppmv @ 15% O2	3502	4500
Oxygen (O2), percent	0.2	-

Note: Reported values represent a 19-minute average.



SUMMARY OF SOURCE TEST RESULTS
Crimson Pipeline
Torrey
ICE G-2

CONSTITUENTS	MEASURED VALUES			AVERAGE	ALLOWABLE
	Run #1	Run #2	Run #3		
Oxides of Nitrogen					
ppmv	71.7	78.7	82.0	77.5	-
ppmv @ 15% O2	20.4	22.4	23.4	22.1	25
lb/hr	0.20	0.21	0.22	0.21	-
lb/MMBtu	0.075	0.083	0.086	0.081	-
gm/BHP-hr	0.197	0.216	0.22	0.213	-
Carbon Monoxide					
ppmv	12427	13974	12457	12953	-
ppmv @ 15% O2	3540	3982	3551	3691	4500
lb/hr	20.63	23.10	20.60	21.45	-
lb/MMBtu	7.93	8.92	7.96	8.27	-
gm/BHP-hr	20.82	23.31	20.79	21.64	-
Total Non-Methane/Ethane Hydrocarbons, as CH4					
ppmv, dry	-	-	-	< 1.8	-
ppmv @ 15% O2, dry	-	-	-	< 0.5	-
lb/hr	< 0.0017	< 0.0017	< 0.0017	< 0.0017	-
Oxygen, %	0.2	0.2	0.2	0.2	-
Stack Flowrate, dscfm	381	379	380	380	-
Moisture, %	17.8	17.8	17.8	17.8	-
Fuel Usage, cfm	41.3	41.1	41.1	41.2	-



SUMMARY OF SOURCE TEST RESULTS
Crimson Pipeline
Torrey
ICE G-1

CONSTITUENTS	MEASURED VALUES			AVERAGE ALLOWABLE	
	Run #1	Run #2	Run #3		
Oxides of Nitrogen					
ppmv	42.9	36.6	36.4	38.6	-
ppmv @ 15% O2	12.3	10.5	10.4	11.0	25
lb/hr	0.12	0.10	0.10	0.11	-
lb/MMBtu	0.045	0.038	0.038	0.041	-
gm/BHP-hr	0.122	0.103	0.101	0.108	-
Carbon Monoxide					
ppmv	12869	12615	11809	12431	-
ppmv @ 15% O2	3674	3603	3372	3550	4500
lb/hr	21.99	21.36	19.80	21.05	-
lb/MMBtu	8.23	8.07	7.56	7.95	-
gm/BHP-hr	22.18	21.55	19.98	21.24	-
Total Non-Methane/Ethane Hydrocarbons, as CH4					
ppmv, dry	-	-	-	15.7	-
ppmv @ 15% O2, dry	-	-	-	4.5	-
lb/hr	< 0.0018	0.024	0.021	0.015	-
Oxygen, %	0.2	0.2	0.2	0.2	-
Stack Flowrate, dscfm	392	389	385	389	-
Moisture, %	17.8	17.8	17.8	17.8	-
Fuel Usage, cfm	42.4	42.0	41.6	42.0	-



SUMMARY OF SOURCE TEST RESULTS
Quarterly Emission Testing
Crimson Pipeline
Torrey Pump Station
G-2

9/21/2015

		<i>Allowable</i>
Oxides of Nitrogen (NO_x)		
ppmv	33.9	-
ppmv @ 15% O ₂	9.7	25
Carbon Monoxide (CO)		
ppmv	14100	-
ppmv @ 15% O ₂	4033	4500
Oxygen (O₂), percent	0.3	-
Opacity, %	0.0	10%

Note: Reported values represent a 15-minute average.



SUMMARY OF SOURCE TEST RESULTS
Quarterly Emission Testing
Crimson Pipeline
Torrey Pump Station
G-1

9/21/2015

		<i>Allowable</i>
Oxides of Nitrogen (NO_x)		
ppmv	71.8	-
ppmv @ 15% O ₂	20.5	25
Carbon Monoxide (CO)		
ppmv	14698	-
ppmv @ 15% O ₂	4205	4500
Oxygen (O₂), percent	0.3	-
Opacity, %	0.0	10%

Note: Reported values represent a 15-minute average.

TORREY STATION 2014

<u>MONTH</u>	<u>*FUEL</u> (CUBIC FEET)	<u>BBLS.</u> (TANK THROUGHPUT)	<u>SOLVENT</u> (GALLONS)	<u>PAINT</u> (GALLONS)
Jan-14	2,000,300	440,243	0	0
Feb-14	1,770,100	381,907	0	0
Mar-14	1,825,300	397,151	0	0
Apr-14	1,978,800	443,922	0	0
May-14	1,889,000	427,437	0	0
Jun-14	1,665,400	393,569	0	0
Jul-14	1,957,600	475,088	0	0
Aug-14	1,706,900	406,837	0	0
Sep-14	1,896,700	451,576	0	0
Oct-14	1,787,700	424,582	0	Ø 4.5
Nov-14	1,883,600	423,719	0	0
Dec-14	1,954,900	427,787	0	0
TOTAL	22,316,300	5,093,818	0	0

***ALSO REFER TO FUEL USE ROLLING TWELVE
MONTH TABLE ATTACHED**

TORREY STATION 2015

<u>MONTH</u>	<u>*FUEL</u> (CUBIC FEET)	<u>BBLS.</u> (TANK THROUGHPUT)	<u>SOLVENT</u> (GALLONS)	<u>PAINT</u> (GALLONS)
Jan-15	1,857,800	402,568	0	0
Feb-15	1,752,100	389,330	0	0
Mar-15	1,853,000	421,136	0	0
Apr-15	1,822,700	411,474	0	0
May-15	1,817,900	409,411	0	0
Jun-15	1,720,400	388,321	0	0
Jul-15	1,723,300	401,540	0	0
Aug-15	1,728,900	408,276	0	0
Sep-15	1,690,200	392,744	0	0
Oct-15			0	0
Nov-15			0	0
Dec-15			0	0
TOTAL	15,966,300	3,624,800	0	0

***ALSO REFER TO FUEL USE ROLLING TWELVE
MONTH TABLE ATTACHED**

VOC = 0.7 PER GAL.

FIBERLOCK TECHNOLOGIES

LBC Specification

1. Product Name

L-B-C® LEAD BARRIER COMPOUND
Type III - Interior/Exterior Encapsulant/
Encasement Coating for lead-based
paint (#5801 white)

2. Manufacturer

Fiberlock Technologies, Inc.
150 Dascomb Road
Andover, MA 01810 USA
Toll Free: 800-342-3755
Internet: www.fiberlock.com

3. Product Description

BASIC USE

- L-B-C Type III is a high-solids, thermoplastic-elastomeric water-based copolymer blended specifically to form a durable yet flexible barrier between lead-based paint and the environment.
- L-B-C Type III is a high-solids coating formulated to offer unparalleled coverage, economics and paint-like aesthetics while preserving historic and architectural detail.
- L-B-C Type III contains Bitrex®, a very bitter-tasting, non-toxic anti-ingestant to discourage oral contact with lead paint.

COMPOSITION & MATERIALS

L-B-C is a water-based elastomeric-thermoplastic.

SIZE

Packaged in 1 gallons cans, 5 gallon pails and 55 gallon drums.

YIELD

L-B-C will yield 120 ft² per gallon at the required thickness of 7 dry mils (14 wet mils).

COLORS

L-B-C is available in white, or can be tinted to a wide array of colors. Contact the manufacturer for more details.

LIMITATIONS

Do not use L-B-C Type III on friction surfaces or movable closures such as door jambs and window jambs. Do not dilute or thin L-B-C Type III. Some states require a surface assessment by a licensed lead inspector before application. Contact your state Department of Health, or Fiberlock for more information. The minimum application surface temperature is 45°F. If applying on wood substrate, ensure moisture content is 11% or below.

4. Technical Data

APPLICABLE STANDARDS

- ASTM E-1795 Standard Specification for Non-Reinforced Liquid Coating Encapsulation Products for Leaded Paint in Buildings.

PHYSICAL/CHEMICAL PROPERTIES

Refer to Table 1 for physical and chemical properties of L-B-C Type III.

APPROVALS

- L-B-C has been independently tested at DL Laboratories, and met or surpassed the ASTM E-1795 Standard Specification for Non-Reinforced Liquid Coating Encapsulation Products for Leaded Paint in Buildings. Refer to Table 2 for ASTM E-1795 results.
- L-B-C Type III satisfies all HUD and EPA requirements which define encapsulation as a permanent abatement method.
- L-B-C Type III has been certified by the Massachusetts Department of Public Health (No. DL-12362), approved by the State of Ohio Department of Health, and is accepted by the New York State Department of Health.

FIRE RATING

L-B-C has a Class "A" fire rating when tested when tested in accordance with



L-B-C Lead Barrier Compound

ASTM E84, with a Flame Spread of "5" and Smoke Developed of "0".

ENVIRONMENTAL CONSIDERATIONS

L-B-C Type III has been designated non-toxic by a certified toxicologist.

5. Installation

PREPARATORY WORK

Before using L-B-C Type III, it is important to determine if the existing paint system is stable and well-adhered. This is done by performing an adhesion tape test on the surface to be coated. Perform this test at least once on each different type of surface to be coated. Clean a small area, rinse with clean water, and allow to dry. Apply a 6-10" strip of pressure-sensitive tape (packing or duct tape). Press the tape down with the rubber end of a pencil. After 90 seconds, remove (do not yank) the tape by pulling smoothly and slowly away from the surface. If more than one square inch of paint is removed along with the tape, the adhesion of the existing paint system is poor. When this occurs, additional preparation (i.e., wet sanding, scraping, cleaning, etc.) must be done to remove

800-342-3755

www.fiberlock.com

FIBERLOCK TECHNOLOGIES

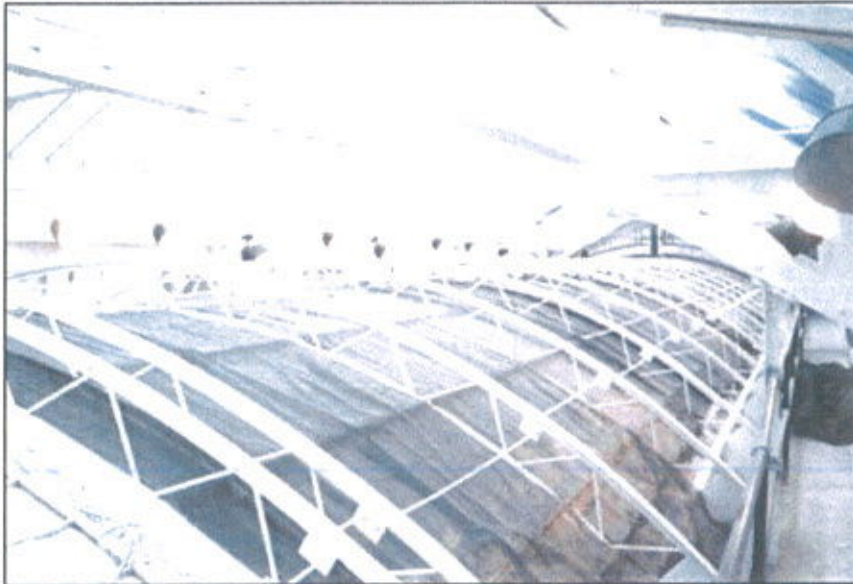


Figure 2. Lead-painted steel coated with L-B-C, National Gallery of Art, Washington, DC

poorly adhered paint. If less than one square inch of paint is removed from the substrate, the surface is sound and can be encapsulated.

SURFACE PREPARATION

Remove or mask electrical plates, hardware, light fixture trim, and similar fittings prior to beginning encapsulation operations. Correct defects and clean surfaces affecting work in this section. Remove existing coatings that are flaking or unacceptable condition to receive coating. (All scraping and sanding should be done wet in order to avoid creating lead dust. Check local, state, and federal regulations and guidelines regarding specific lead-based paint abatement practices.) Seal any marks or defects that might bleed through encapsulant with an appropriate primer. Clean mold-contaminated surfaces with IAQ 1000, or use an EPA Registered antimicrobial disinfectant cleaner such as Fiberlock IAQ 2000, Fiberlock IAQ 2500, Shockwave or Shockwave RTU. Rinse with clean

water and allow surface to dry.

Concrete and masonry: Remove dirt, chalk, loose mortar scale, salt alkalis, oil and grease with a lead-specific detergent. Rinse well and allow surface to dry. Apply masonry conditioner to prevent future chalking.

Plaster, Gypsum Wallboard: Fill all surface defects, wet sand smooth and spot prime with stain blocking primer. Glossy surfaces must be wet sanded or otherwise deglossed prior to application of encapsulant.

Ferrous Metal: Remove rust and scale by wire brushing. Remove dust, dirt, oil and grease with lead specific detergent. When dry, immediately apply a rust-inhibiting direct to metal primer to prevent flash rusting.

Galvanized Metal: Remove dust, dirt, oil and grease with a lead-specific detergent. For areas where the galvanization has been damaged, apply a rust-inhibiting direct-to-metal primer to prevent flash rusting.

Aluminum: Remove dust, dirt, oil and grease with a lead-specific detergent. Etch the surface using an etching type metal prep, or apply a tie-coat once the aluminum surface is clean and dry.

MIXING

Mix L-B-C Type III thoroughly prior to application.

APPLICATION METHODS

Apply L-B-C Type III only after the existing paint system has been rendered clean, dry, sound and dull. L-B-C Type III can be applied using a brush, roller or airless sprayer. One application by airless spray, or two applications by brush/roller are typically sufficient to achieve the required minimum dry film thickness of 7 mils. Clean up tools and drippings with warm, soapy water be-

TABLE 1 PHYSICAL/CHEMICAL PROPERTIES OF L-B-C TYPE III

Property	L-B-C Type III
Percent Solids	62 ±2% by weight
Volatile	Principally water
Average Particle Size	0.2 microns
Weight at 78°F	11.5 ±0.3 lbs/gal
Viscosity at 78°F	95-120 KU
Flash Point	Noncombustible (Water-based)
Minimum Shelf Life at 78°F	12 months in unopened container
Finish	Eggshell 60° spec. gloss: 4 ±1 85° spec. gloss: 3 ±1
Drying time at 78°F	To touch: 1-2 hours Additional coats/topcoat: 8-16 hours Full cure: 30 days

800-342-3755

www.fiberlock.com

FIBERLOCK

TECHNOLOGIES



Figure 3. Proper spray application of L-B-C Lead Barrier Compound

fore L-B-C Type III dries.

PRECAUTIONS

L-B-C Type III must be applied when the atmosphere and surface temperatures during application and for 12 hours thereafter are above 45°F. Protect from freezing. Keep container tightly sealed when not in use.

6. Availability and Cost

AVAILABILITY

L-B-C Type III is available through a network of authorized distributors and paint stores. Contact Fiberlock Technologies, Inc. at 1-800-342-3755 for distributor information or visit www.fiberlock.com.

COST

Material cost per square foot can be estimated by dividing the price per gallon from an authorized distributor by 120 ft² per gallon.

7. Warranty

Fiberlock Technologies, Inc., warrants L-B-C Type III for a minimum of 20 years from the date that the product is applied to form an effective barrier from the hazards of the encapsulated lead-based paint. The warranty described in this paragraph, expressed or implied, is including but not limited to the implied warranties of the salability and fitness for a particular purpose. User shall determine the suitability of L-B-C Type III's use and assume any and all risks and liabilities which may arise in connection

with the application of L-B-C Type III. This warranty is extended only to the purchaser of L-B-C Type III and does not apply to any damages which are a direct result of improper surface preparation and/or application, including, but not limited to:

1. The failure to properly apply L-B-C Type III to a sound surface, which has been cleaned of foreign matter and dry at the time of application.
2. The failure to apply L-B-C Type III above the recommended minimum application temperature.
3. The failure to apply L-B-C Type III in full accordance with Fiberlock Technologies' written application instructions and guidelines.

This warranty does not extend to, nor shall Fiberlock Technologies be liable for any damage resulting from any abuse of the encapsulated surface by the tenants or occupants, improper maintenance, water damage, or other conditions beyond Fiberlock Technologies' control. The sole and only liability under this warranty shall be, at Fiberlock Technologies' option, either to replace the product if proved defective or to refund the purchase price paid. Fiberlock Technologies shall not be held liable for any incidental damages, or for any consequential damages to property, or any losses of revenue which may have been caused by a defect or failure of the product. The purchaser of this product must notify Fiberlock at 150 Dascomb Road, Andover, Massachusetts 01810 (800-342-3755) within

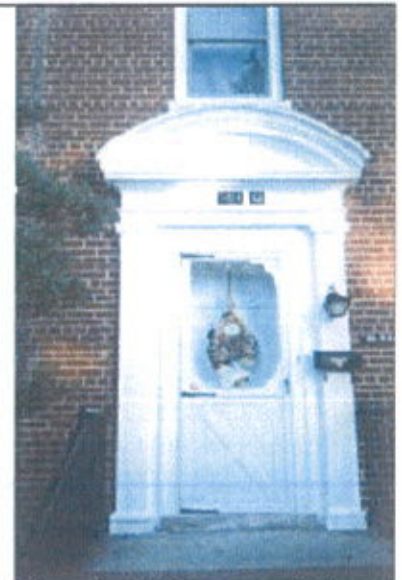


Figure 4. L-B-C over wood door frames at Fort Knox, KY

45 days to advise of any suspected manufacturing defects. This warranty gives the purchaser specific legal rights and possible additional rights which may vary from state to state.

8. Maintenance

If surfaces coated with L-B-C Type III are damaged, repair and re-apply L-B-C Type III immediately. Inspect for damage periodically.

9. Technical Services

Fiberlock Technologies, Inc. employs a knowledgeable factory trained team of field representatives. In addition, technical questions can be answered by one of our full time technical service representatives by calling 1-800-342-3755. Complete specifications and technical information can also be obtained online at www.fiberlock.com.

10. Filing System

Additional information is available upon request.

800-342-3755

www.fiberlock.com

TABLE 2

ASTM E-1795 RESULTS FOR L-B-C TYPE III

<u>Requirement</u>	<u>ASTM Test</u>	<u>Result</u>
Adhesion	D 3359	5A
Chalking	D 4214	8
Density or weight per gallon	D 1475	11.5 lbs./gal.
Dry abrasion resistance	D 4060	7.9%
Dry-film thickness	D 1005, D 1186	7 mils
Flexibility	D 522	conforms
Impact resistance	D 2794	160 + in. lbs.
Mildew resistance	D 3273, D 3274	10
Paintability	D 3359	5A
Scrub resistance	D 2486	1350 cycles
Surface burning characteristics	E 84	flame spread 5 smoke developed 0
Tensile properties	D 2370	tensile strength 565 psi elongation 48.9% elongation at 100 psi 1.2%
YOC content	D 3960	grams/liter 85 pounds/gallon 0.7
Water and chemical resistance	D 1308	50% ethanol conforms 5% acetic acid conforms 5% sodium hydroxide conforms 5% hydrochloric acid conforms 5% citric acid conforms corn oil conforms 2% phosphoric acid conforms 5% trisodium phosphate conforms distilled water conforms
Water vapor transmission (perms)	D 1653	0.28 grains/ft ² /hr.
Weathering/aging	G 53	Weathering 1000 Hrs.: chalking 8 adhesion 5A flexibility conforms tensile strength 695 psi elongation -34.4% Aging 12 cycles: adhesion 5A flexibility conforms tensile strength 635 psi elongation -22.7% Aging 2 weeks at 40°C: adhesion 5A flexibility conforms tensile strength 633 psi elongation -5.5%

Primer

VOC = 1.5 PER GAL

Material Safety Data Sheet



Date of issue 24 July 2014

Version 8

~~Primer~~

1. Product and company identification

Product name : AMERLOCK 2 VOC PEARL GRAY RESIN

Code : UC87115/05

Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

Technical Phone Number : 888-977-4762

2. Hazards identification

Emergency overview : WARNING!
COMBUSTIBLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not get on skin or clothing. Avoid contact with eyes. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Severely irritating to the respiratory system. Can irritate eyes, nose, mouth and throat.

Ingestion : May be harmful if swallowed.

Skin : May cause an allergic skin reaction.

Eyes : Moderately irritating to eyes.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Ingestion : No specific data.

Skin : Adverse symptoms may include the following:
irritation
redness

Eyes : Adverse symptoms may include the following:
irritation
watering
redness

Medical conditions aggravated by over-exposure : Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).
See toxicological information (Section 11)

Product name AMERLOCK 2 VOC PEARL GRAY RESIN

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Epoxy resin (MW < 700)	25068-38-6	30 - 60
Talc, not containing asbestiform fibres	14807-96-6	10 - 30
tert-butyl acetate	540-88-5	3 - 7
titanium dioxide	13463-67-7	1 - 5
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	68515-49-1	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Extinguishing media

Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: Do not use water jet.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
Falc, not containing asbestiform fibres	TWA	Not established	20 mppcf Z	2 mg/m ³ R	2 mg/m ³ R 6 mg/m ³ 3 mg/m ³ R	Not established
tert-butyl acetate	TWA	200 ppm	200 ppm	200 ppm	200 ppm	Not established
	STEL	Not established	Not established	Not established	250 ppm	Not established
titanium dioxide	TWA	10 mg/m ³	15 mg/m ³ TD	10 mg/m ³ TD	10 mg/m ³ (as Ti)	Not established
	STEL	Not established	Not established	Not established	20 mg/m ³ (as Ti)	Not established

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes

: Safety glasses with side shields.

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

: butyl rubber

8 . Exposure controls/personal protection

Respiratory	: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Skin	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state	: Liquid.
Flash point	: Closed cup: 80°C (140°F)
Explosion limits	: Lower: 1.2%
Color	: Not available.
Odor	: Not available.
pH	: Not available.
Boiling/condensation point	: >37.78°C (>100°F)
Melting/freezing point	: Not available.
Specific gravity	: 1.42
Density (lbs / gal)	: 11.85
Vapor pressure	: 0.16 kPa (1.2 mm Hg) [room temperature]
Vapor density	: Not available.
Volatility	: 10% (v/v), 6.28% (w/w)
Evaporation rate	: 0.1 (butyl acetate = 1)
Partition coefficient: n-octanol/water	: Not available.
% Solid. (w/w)	: 93.72

10 . Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Reactive or incompatible with the following materials: acids, oxidizing materials, strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product name AMERLOCK 2 VOC PEARL GRAY RESIN

11 . Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Epoxy resin (MW < 700)	LD50 Oral	Rat	>2 g/kg	-
	LD50 Dermal	Rabbit	>2 g/kg	-
tert-butyl acetate	LD50 Oral	Rat	4100 mg/kg	-
titanium dioxide	LD50 Oral	Rat	>10 g/kg	-
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	LD50 Oral	Rat	>60000 mg/kg	-
	LD50 Dermal	Rabbit	16000 mg/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Target organs

: Contains material which causes damage to the following organs: central nervous system (CNS).
Contains material which may cause damage to the following organs: lungs, cardiovascular system, upper respiratory tract, skin, eye, lens or cornea.

Carcinogenicity

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
titanium dioxide	A4	2B	-	-

Carcinogen Classification code:
ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute EC50 100 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

13 . Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	III	III	III	III
Environmental hazards	No.	Yes.	No.	Yes.
Marine pollutant substances	Not applicable.	(Epoxy resin (MW < 700))	Not applicable.	(Epoxy resin (MW < 700))

Additional information

- DOT** : This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials.
- TDG** : The marine pollutant mark is not required when transported by road or rail.
- Mexico** : None identified.
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15 . Regulatory information

- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Australia inventory (AICS)** : At least one component is not listed.
- Canada inventory (DSL)** : All components are listed or exempted.
- China inventory (IECSC)** : All components are listed or exempted.
- Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.
- Japan inventory (ENCS)** : At least one component is not listed.
- Korea inventory (KECI)** : All components are listed or exempted.
- New Zealand (NZIoC)** : Not determined.
- Philippines inventory (PICCS)** : All components are listed or exempted.

United States

U.S. Federal regulations :

SARA 302/304: No products were found.

ERCLA: Hazardous substances.: n-butyl acetate: 5000 lbs. (2270 kg); tert-butyl acetate: 5000 lbs. (2270 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

Chemical name **CAS #** **Acute** **Chronic** **Fire** **Reactive** **Pressure**

Product name AMERLOCK 2 VOC PEARL GRAY RESIN

15. Regulatory information

Epoxy resin (MW < 700)	25068-38-6	Y	N	N	N	N
Talc, not containing asbestiform fibres	14807-96-6	Y	N	N	N	N
tert-butyl acetate	540-88-5	N	N	Y	N	N
titanium dioxide	13463-67-7	N	Y	N	N	N
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	68515-49-1	N	N	N	N	N
Product as-supplied :		Y	Y	Y	N	N

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 2 Health : 2 Reactivity : 0

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 2 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 2 Instability : 0

Date of previous issue : 3/16/2014.

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

POINT

VOC = 2.2 PER GAL

Material Safety Data Sheet



~~AMER~~

Date of issue 15 May 2014

Version 26.01

1. Product and company identification

Product name : **AMERSHIELD VOC LIGHT TIN**

Code : AMV-T2A

Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

Technical Phone Number : 888-977-4762

2. Hazards identification

Emergency overview : DANGER!

COMBUSTIBLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. SUSPECT CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER. May form explosive peroxides. Risk of explosion by shock, friction, fire or other sources of ignition.

This material increases the risk of fire and may aid combustion. Keep away from heat, sparks and flame. Keep away from combustible material. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.

Ingestion : May be harmful if swallowed.

Skin : Harmful in contact with skin. Moderately irritating to the skin.

Eyes : Moderately irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Wollastonite (Ca(SiO ₃))	13983-17-0	10 - 30
tert-butyl acetate	540-88-5	10 - 30
titanium dioxide	13463-67-7	7 - 13
polyester resin	Not available.	5 - 10
ethyl 3-ethoxypropionate	763-69-9	1 - 5
n-butyl acetate	123-86-4	0.5 - 1.5
Solvent naphtha (petroleum), heavy arom.	64742-94-5	0.5 - 1.5
naphthalene	91-20-3	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : Combustible liquid. Risk of explosion by shock, friction, fire or other sources of ignition. May form explosive peroxide. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Avoid shock and friction. Keep away from heat, sparks and flame.

Extinguishing media

Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: Do not use water jet.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Avoid shock and friction. Avoid all possible sources of ignition (spark or flame). Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Keep away from combustible material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Separate from reducing agents and combustible materials. See NFPA 430, Code for the Storage of Liquid and Solid Oxidizers. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
tert-butyl acetate	TWA	200 ppm	200 ppm	200 ppm	200 ppm	Not established
	STEL	Not established	Not established	Not established	250 ppm	Not established
titanium dioxide	TWA	10 mg/m ³	15 mg/m ³ TD	10 mg/m ³ TD	10 mg/m ³ (as Ti)	Not established
	STEL	Not established	Not established	Not established	20 mg/m ³ (as Ti)	Not established
ethyl 3-ethoxypropionate	TWA	Not established	Not established	50 ppm	Not established	50 ppm
	STEL	Not established	Not established	Not established	Not established	100 ppm
n-butyl acetate	TWA	150 ppm	150 ppm	150 ppm	150 ppm	Not established
	STEL	200 ppm	Not established	200 ppm	200 ppm	Not established
naphthalene	TWA	10 ppm S	10 ppm	10 ppm	10 ppm	Not established
	STEL	15 ppm S	Not established	15 ppm	15 ppm	Not established

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

- Eyes** : Safety glasses with side shields.

8 . Exposure controls/personal protection

- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Respiratory** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 45.56°C (114°F)
- Explosion limits** : Lower: 1.9%
- Material supports combustion.** : Yes.
- Color** : Not available.
- Odor** : Not available.
- pH** : Not available.
- Boiling/condensation point** : >37.78°C (>100°F)
- Melting/freezing point** : Not available.
- Specific gravity** : 1.36
- Density (lbs / gal)** : 11.35
- Vapor pressure** : 1.3 kPa (10.1 mm Hg) [room temperature]
- Vapor density** : Not available.
- Volatility** : 37% (v/v), 24.09% (w/w)
- Evaporation rate** : 0.29 (butyl acetate = 1)
- Partition coefficient: n-octanol/water** : Not available.
- % Solid. (w/w)** : 75.91

10 . Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see Section 7).
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Drying on clothing or other combustible materials may cause fire.
- Materials to avoid** : Reactive or incompatible with the following materials: combustible materials, organic materials, metals, acids, alkalis, oxidizing materials, reducing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
tert-butyl acetate	LD50 Oral	Rat	4100 mg/kg	-
titanium dioxide	LD50 Oral	Rat	>10 g/kg	-
ethyl 3-ethoxypropionate	LD50 Oral	Rat	3200 mg/kg	-
	LD50 Dermal	Rabbit	10 mL/kg	-
n-butyl acetate	LD50 Oral	Rat	10.768 g/kg	-
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LC50 Inhalation	Rat	>21.1 mg/l	4 hours
Solvent naphtha (petroleum), heavy arom.	LD50 Oral	Rat	3.2 g/kg	-
	LD50 Dermal	Rabbit	>1.693 g/kg	-
naphthalene	LD50 Oral	Rat	490 mg/kg	-
	LD50 Dermal	Rabbit	>20 g/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain, central nervous system (CNS).
Contains material which may cause damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

Carcinogenicity

Carcinogenicity : Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
titanium dioxide	A4	2B	-	-
naphthalene	A4	2B	Reasonably anticipated to be a human carcinogen.	-

Carcinogen Classification code:
ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

12. Ecological information

Environmental effects : No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere.

13 . Disposal considerations

inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to **Section 7: HANDLING AND STORAGE** and **Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION** for additional handling information and protection of employees. **Section 6. Accidental release measures**

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	28893.6	Not applicable.	Not applicable.	Not applicable.
RQ substances	(tert-butyl acetate)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.
- TDG** : None identified.
- Mexico** : None identified.
- IMDG** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15 . Regulatory information

- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Australia inventory (AICS)** : All components are listed or exempted.
- Canada inventory (DSL)** : All components are listed or exempted.
- China inventory (IECSC)** : At least one component is not listed.
- Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.
- Japan inventory (ENCS)** : All components are listed or exempted.
- Korea inventory (KECI)** : Not determined.
- New Zealand (NZIoC)** : Substance Use Restricted
- Philippines inventory (PICCS)** : All components are listed or exempted.

United States

U.S. Federal regulations :

15 . Regulatory information

SARA 302/304: No products were found.

CERCLA: Hazardous substances.: acetic acid: 5000 lbs. (2270 kg); n-butyl acetate: 5000 lbs. (2270 kg); naphthalene: 100 lbs. (45.4 kg); tert-butyl acetate: 5000 lbs. (2270 kg); acetone: 5000 lbs. (2270 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
tert-butyl acetate	540-88-5	N	N	Y	N	N
titanium dioxide	13463-67-7	N	Y	N	N	N
polyester resin	Not available.	Y	N	N	N	N
ethyl 3-ethoxypropionate	763-69-9	Y	N	Y	Y	N
n-butyl acetate	123-86-4	Y	N	Y	N	N
Solvent naphtha (petroleum), heavy arom.	64742-94-5	Y	N	Y	N	N
naphthalene	91-20-3	Y	Y	N	Y	N
Product as-supplied :		Y	Y	Y	Y	N

<u>SARA 313</u>	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
Supplier notification	naphthalene	91-20-3	0.1 - 1

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 2 Health : 2 Reactivity : 0

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 2 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 2 Instability : 0

Date of previous issue : 3/14/2014.

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

16 . Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.