



Integrative Analysis LEED Pilot Credit – Emerald® Interior Latex Flat

K35W00451

Professional painters have it all with Emerald® Interior Latex Paint. A paint and primer in one with advanced stain blocking technology delivers best-in-class overall performance. Emerald prevents stains from penetrating and offers maximum resistance to water streaking and spotting. It is available in four sheens and many colors. For additional information, please visit www.sherwin.com.



The product image to the right is an example of an Emerald Interior Latex formula.

Table 1: Summary of Potential Product Impacts

		Potential Human Health Impacts¹:	Potential occupant safety impacts:	Potential environmental impacts²:
Life Cycle Stage	Product Assembly/ Manufacturing	Majority of content characterized by low/mild hazards, although some materials present moderate hazard and/or potential exposure pathways.	Not applicable given product function.	Raw material extraction is the largest contributor towards carbon footprint, acidification, eutrophication, smog formation, and energy requirements.
	Building Product Installation	Majority of content characterized by low/mild hazards, although some materials present moderate hazard.	Not applicable given product function.	Some impacts to the environment through product transportation to store and application site. Mostly relevant to carbon footprint and smog formation.
	Product Use	Majority of content characterized by low/mild hazards. Some content presents moderate hazard potential.	Not applicable given product function.	Negligible/Minimal impacts to the environment.
	Product Maintenance	Majority of content characterized by low/mild hazards. Some content presents moderate hazard potential.	Not applicable given product function.	Negligible/Minimal impacts to the environment.
	End of Product Life/Reuse	Majority of content characterized by low/mild hazards and/or potential exposure pathways. Some content presents moderate hazard potential. Not considered hazardous waste.	Not applicable given product function.	Negligible/Minimal impacts to the environment.

¹ Based off externally reviewed Product Lens Assessment. See Page 4 for additional details.

² Based off externally reviewed Environmental Product Declaration. See Page 3 for additional details.



Product Description:

Emerald Interior Latex Flat is a durable paint and primer in one with excellent washability, stain blocking technology, and exceptional coverage for use on existing coatings, bare drywall or plaster, primed masonry/block, and primed wood. It also contains agents which inhibit the growth of mold and mildew on the surface of the paint coating.

Service Life:

The service life for Emerald Interior Latex Flat will depend on substrate, environmental conditions, and other factors. However, estimations for service life are provided in the [full Environmental Product Declaration for Emerald Interior Latex Flat](#).

Waste:

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please visit www.paintcare.org/ for information about disposing leftover latex paint. If possible, unused paint should be taken to an appropriate recycling/take-back center. Additional information can also be found on the Sherwin-Williams website at: www.sherwin-williams.com/homeowners/ask-sherwin-williams/painting/interior-painting-how-tos/interior-cleaning-up/.

Emissions:

Emerald Interior Latex Flat formulas are considered low-VOC and are UL/ GREENGUARD certified. The specific UL/ GREENGUARD certificates are available at www.greenguard.org.

VOC determination was done using the federally-accepted methods outlined by the EPA in the Federal Register. Additional information on VOCs and UL/ GREENGUARD certification can be found on the environmental data sheets for the specific formula on www.sherwin.com.

Third-Party Verification:



PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818



Environmental Assessment:

The summary information in Figure 1 and Table 2, below, is from the Emerald Interior Latex Environmental Product Declaration³ (EPD). The full EPD is available [here](#) and eligible for LEED v4 and v4.1 credit. NSF International reviewed and certified the EPD for publication and it is conformant with the American Coatings Association’s Product Category Rule for Architectural Coatings, ISO 21930, ISO 14040, and ISO 14025.

Generally speaking, the EPD showed that the most impactful aspect of the coating were the creation of the raw materials used in the coating. As such, efficient application and durability are the primary drivers to minimize environmental impacts. [Full environmental impact results are available in the EPD.](#)

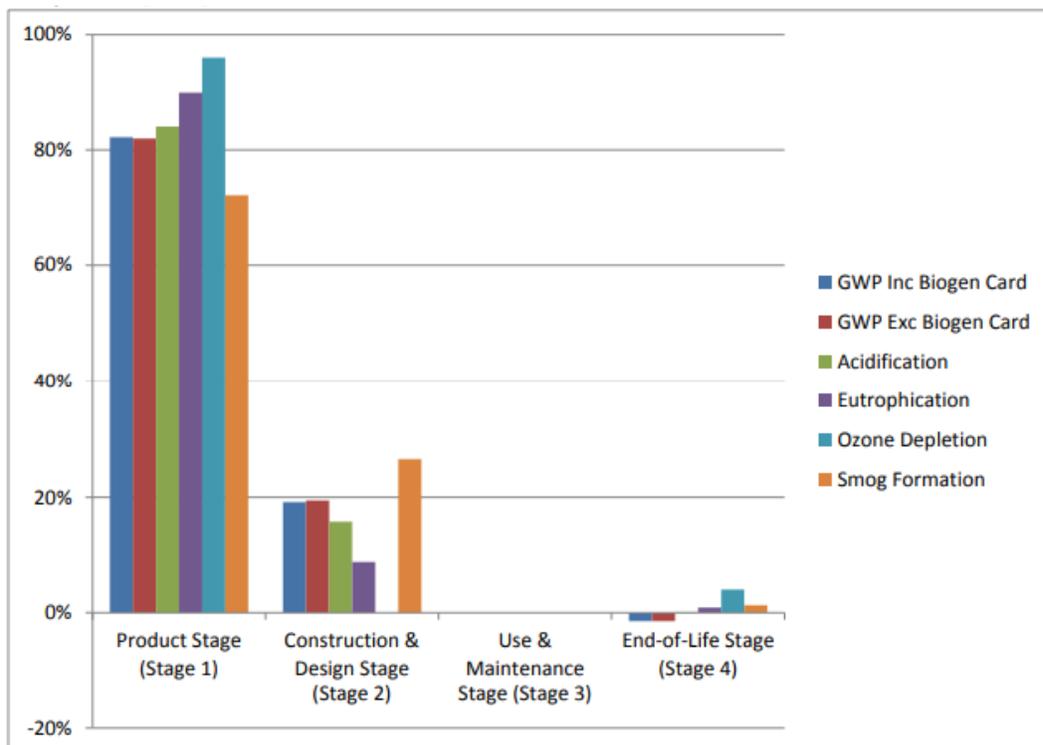


Figure 1. Impact Category Result Breakdown by ISO 21930 Stage for Average Emerald Formulation.

Table 2. Overall LCA Impact Category Results for K35W451 Formulation.

	Global Warming Potential - Includes Biogenic Carbon (kg CO2e)	Global Warming Potential - Excludes Biogenic Carbon (kg CO2e)	Acidification (kg SO2e)	Eutrophication (kg N e)	Ozone Depletion (kg CFC-11e)	Smog Formation (kg O3e)
K35W451	2.07	2.06	0.34	1.11E-03	6.42E-08	0.10

<u>Third-Party Verification:</u>	
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³ While this study met all requirements of ISO 14044, differences in certain assumptions, data quality, and variability between LCA data sets may still exist. As such, caution should be exercised when evaluating these results to that of different manufacturers, as the LCA results may not be entirely comparable.



Toxicological Assessment:

The following table represents the top 100% of the material content and subsequent rating for Emerald Interior Latex conducted by MBDC and verified by UL Environment as part of their Product Lens Material Health Assessment program⁴. This program is eligible for LEED v4 and v4.1 credit.

The full Product Lens assessment for Emerald Interior Latex is publicly available at www.paintdocs.com.

Table 3. Results of Toxicity Assessment as Determined by MBDC and UL Environment.

Materials	Result			
	Supply Chain/ MFG	Install	Use	End of Use
Water				
Acrylic Resin				
Extender Pigments	I			
Titanium Dioxide	I			
Other Polymers				
Additives				
Coalescent				

I = Inhalation Hazard, O = Oral Hazard, D = Dermal Hazard

	Low or mild hazard identified and/or potential exposure
	Moderate hazard identified and/or potential exposure
	Problematic concern found. The combination of the hazard and potential exposure leads to some caution for some uses and/or applications.
	Cannot be fully assessed due to either lack of complete formulation, or lack of toxicological information for one or more ingredients.
	Highly problematic material containing one or more chemicals classified as CMR and having a plausible route of exposure.

<u>Third-Party Verification:</u>	
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⁴ UL's Product Lens is a next generation transparency tool that shows the substance's hazard data in context using exposure indicators along four phases within the life cycle of the product. The additional transparency along the four phases, combined with the identification of potential exposures, provides critically useful information for decision. All information is verified by UL, helping manufacturers address the skepticism inherent in self-disclosure, and signaling trust and legitimacy to specifiers and purchasers.



Safety Assessment:

The summary safety information below represents Section 2 from the Emerald Interior Latex Flat Safety Data Sheet (SDS). The full SDS is conformant with GHS guidelines and is available [here](#). The steps outlined in Section 2 represent the installation and use phases. The raw material and production phase safety information is captured in the toxicological section above.

There are no specific proprieties of this product relative to comparable interior coatings that facilitate additional building safety (such as non-slip floor coatings or intumescent coatings).

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: CARCINOGENICITY - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 16.9% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 16.9% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 16.9%
GHS label elements	
Hazard pictograms	: 
Signal word	: Warning
Hazard statements	: Suspected of causing cancer.
Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing.
Response	: IF exposed or concerned: Get medical attention.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
Hazards not otherwise classified	: None known.

Third-Party Verification:

N/A