

Integrative Analysis LEED Pilot Credit – ProMar[®] 200 Zero VOC <u>B28W2600</u>

Professional painters have it all with ProMar® 200 Zero VOC Interior Latex Paint. A complete professional line that not only has zero VOCs, but is also available in six sheens and many colors. All while delivering maximum productivity with outstanding durability and touch up. For additional information, please visit <u>www.sherwin.com</u>.



The product image to the right is an example of a ProMar 200 Zero VOC formula.

Table 1: Summary of Potential Product Impacts

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. Preservatives characterized as having hazard and/or exposure concerns.	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. Preservatives characterized as having hazard and/or exposure concerns.	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.



Product Description:

ProMar 200 Zero VOC is a durable, professional quality, washable, interior vinyl acrylic finish for use on walls and ceilings of primed plaster, wallboard, wood, masonry, and primed metal.

Service Life:

The service life for ProMar 200 Zero VOC will depend on substrate, environmental conditions, and other factors. However, estimations for service life are provided in the <u>full Environmental Product Declaration</u> <u>for the ProMar 200 Zero VOC product line.</u>

Waste:

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please visit <u>www.paintcare.org/</u> 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: <u>www.sherwin-</u> williams.com/homeowners/ask-sherwin-williams/painting/interior-painting-how-tos/interior-cleaning-up/.

Emissions:

ProMar 200 Zero VOC formulas are considered no-VOC and are GreenGuard certified. The specific GreenGuard certificates are available at <u>www.greenguard.org</u>.

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

Third-Party Verification:





Environmental Assessment:

The summary information in Figure 1 and Table 2, below, is from the ProMar 200 Zero VOC Environmental Product Declaration¹ (EPD). The full EPD is available <u>here</u> and eligible for LEED v4 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. <u>Full environmental impact results are available in the EPD</u>.

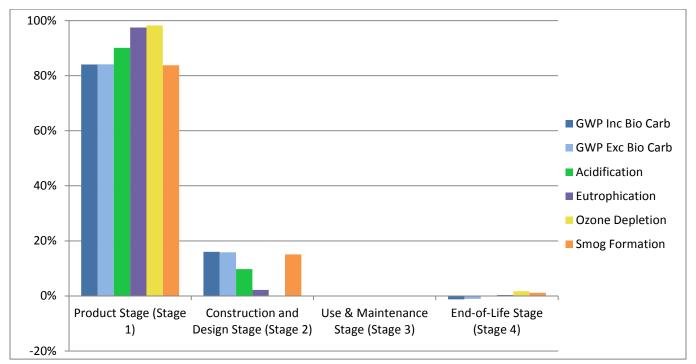


Figure 1. Impact Category Result Breakdown by ISO 21930 Stage for Average ProMar 200 Formulation.

Table 2. Overall LCA Impact Category Results for Average ProMar 200 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)
Average PM 200 Formula	2.90	2.91	0.60	6.54E-03	1.76E-07	0.21



¹ 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 99% of the material content and subsequent rating for ProMar 200 Zero VOC conducted by MBDC and verified by UL Environment as part of their Product Lens Material Health Assessment program². This program is eligible for LEED v4 credit.

The full Product Lens assessment for ProMar 200 Zero VOC is publicly available at <u>www.paintdocs.com</u>.

Material	CAS Number	Role	%				
				MFG	Install	Use	End of Use
Water	7732-18-5	Solvent	35%-65%				
Primary Resin	Proprietary	Resin/Polymer	10%-20%				
Titanium Dioxide	13463-67-7	Pigment	0%-20%	1			
Calcium Carbonate	1317-65-3	Extender	0%-25%				
Other Resins	Proprietary	Resin/Polymer	0%-10%	D			
Extender Pigments	Proprietary	Extender Pigments	0%-5%				
Coalescent	Proprietary	Coalescent	0%-2%				
Other Additives	Proprietary	Other Additives	0%-5%	I			
Thickener	Proprietary	Thickener	0%-1%				
pH Modifier	Proprietary	pH Modifier	0%-1%				

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

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.



² 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 ProMar 200 Zero VOC Safety Data Sheet (SDS). The full SDS is conformant with GHS guidelines and is available <u>here</u>. 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).

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 ι	Inknown toxicity	y: 12.5%	
GHS label elements						
Hazard pictograms	:	•				
Signal word	: Warning					
Hazard statements		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		contents and container in regulations.	accordance with all	local, regional,	national a	nd
Date of issue/Date of revision	: 4/22/2016	Date of previous issue	: 3/28/2016	Version	:2.01	1/10
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 containers fo	to the SDS for additional r storage.	information. Do no	ot transfer conte	ents to oth	er
Hazards not otherwise classified	: None known					

Third-Party Verification:	N/A