

# Integrative Analysis LEED Pilot Credit – Loxon Concrete & Masonry Primer ® LX02W0050

Professional painters have it all with Loxon Concrete & Masonry Primer®. An acrylic coating specifically engineered for interior and exterior, above-grade, masonry surfaces requiring a high performance primer. It is highly alkali and efflorescence resistant and can be applied to surfaces with a pH of 6 to 13. For additional information, please visit <a href="https://www.sherwin.com">www.sherwin.com</a>.



The product image to the right is an example of a Loxon Concrete & Masonry Primer formula.

**Table 1: Summary of Potential Product Impacts** 

		Potential Human Health Impacts <sup>1</sup> :	Potential occupant safety impacts:	Potential environmental impacts <sup>2</sup> :
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. One material assessed as potential endocrine disruptor.	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. One material assessed as potential endocrine disruptor.	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. One material assessed as potential endocrine disruptor.	Not applicable given product function.	Some impact to smog formation potential due to VOC content.
	Product Maintenance	Majority of content characterized by low/mild hazards. Some content presents moderate hazard potential. One material assessed as potential endocrine disruptor.	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. One material assessed as potential endocrine disruptor.	Not applicable given product function.	Negligible/Minimal impacts to the environment.

<sup>&</sup>lt;sup>1</sup> Based off externally reviewed Product Lens Assessment. See Page 4 for additional details.

<sup>&</sup>lt;sup>2</sup> Based off externally reviewed Environmental Product Declaration. See Page 3 for additional details.



### **Product Description:**

Loxon Concrete & Masonry Primer is perfect for sealing and conditioning porous above-grade masonry surfaces. It tolerates the high pH common in new masonry and ensures a uniform look and long-lasting finish.

# Service Life:

The service life for Loxon Concrete & Masonry Primer will depend on substrate, environmental conditions, and other factors. However, estimations for service life are provided in the <u>full Environmental Product Declaration for Loxon Concrete & Masonry Primer.</u>

### Waste:

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

### **Emissions:**

Loxon Concrete & Masonry Primer is considered low-VOC and is UL/ GREENGUARD certified. The specific UL/ GREENGUARD certificate is available at <a href="https://www.greenguard.org">www.greenguard.org</a>.

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 <a href="https://www.sherwin.com">www.sherwin.com</a>.

**Third-Party Verification:** 





#### **Environmental Assessment:**

The summary information in Figure 1 and Table 2, below, is from the Loxon Concrete & Masonry Primer Environmental Product Declaration<sup>3</sup> (EPD). The full EPD is available <a href="here">here</a> 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. <u>Full environmental impact results are available in the EPD.</u>

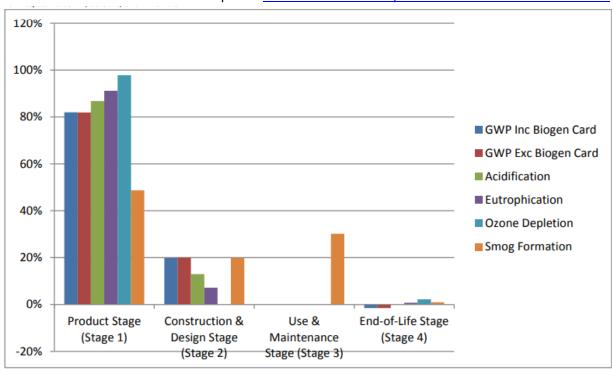


Figure 1. Impact Category Result Breakdown by ISO 21930 Stage for Loxon Concrete & Masonry Primer.

Table 2. Overall LCA Impact Category Results for LX02W0050 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)
LX02W0050	3.30	3.28	0.80	2.54E-03	1.59E-07	0.29

Third-Party Verification:

Certified Environmental Product Declaration www.nsf.org

<sup>&</sup>lt;sup>3</sup> 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 Loxon Concrete & Masonry Primer conducted by MBDC and verified by UL Environment as part of their Product Lens Material Health Assessment program<sup>4</sup>. This program is eligible for LEED v4 and v4.1 credit.

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

Materials	Result			
	Supply Chain/ MFG	Install	Use	End of Use
Water				
Titanium Dioxide	l l			
Acrylic Polymer				
Other Polymers				
Extender Pigments	- I			
Additive				
Thickener				
pH Modifier				
Surfactant				

#### 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.

**Third-Party Verification:** 



**Environment** 

<sup>&</sup>lt;sup>4</sup> 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 Loxon Concrete & Masonry Primer Safety Data Sheet (SDS). The full SDS is conformant with GHS guidelines and is available <a href="here.">here.</a>
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 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 9.2% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 9.2% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 9.2%

GHS label elements

Hazard pictograms



Signal word

Danger

**Hazard statements** 

May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

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. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response

 Get medical attention if you feel unwell. 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. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM

OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. 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
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