

V-Gard® GREEN Helmet Narrative for the “Innovation in Design” Section of a LEED Application

V-Gard GREEN is the world’s first protective helmet shell produced from renewable resources. Unlike traditional helmets manufactured from high-density polyethylene (HDPE) that are sourced from nonrenewable petrochemicals, the MSA V-Gard GREEN helmet is manufactured using “green” HDPE (GHDPE) sourced from sugarcane ethanol.

For every ton of GHDPE produced, 2.1 tons of carbon dioxide are captured from the atmosphere and the environment¹. Conversely, production of one ton of polyethylene sourced from petrochemicals (fossil fuels) actually emits 2.24 tons of carbon dioxide into the atmosphere². In other words, switching from a fossil fuel-derived HDPE to a sugarcane-derived GHDPE represents a reduction of carbon footprint by some 8,700 pounds of CO₂ for every ton of high-density polyethylene produced.

The V-Gard GREEN Helmet carries a #2 Plastic recycling rating, carries low risk of leaching, and is readily recyclable into many other goods, including detergent bottles, pens, recycling containers, and drainage pipes.

If you require any additional information on this topic, please contact MSA Customer Service Center at 1-800-672-2222.

¹Life Cycle Assessment of Bio-Based Polyethylene I’m green™ bio-based HDPE - version 5.0

²Based on ecoinvent v3.9.1 data 1 kg of fossil HDPE production {GLO} / market for / Cut-off, U).

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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