



Zinc Phosphate Conversion Coating - Immersion

1 Scope

1.1 Material Description. This specification covers the material and performance requirements for immersion applied zinc phosphate conversion coatings.

1.2 Symbols. Not applicable.

1.3 Applicability. These materials are intended for vehicle bodies and parts that will subsequently receive a cathodic electrocoat primer.

1.4 Remarks. Conversion coatings are intended to provide a crystalline, corrosion resistant, uniform, chemically converted, adhesion promoting surface on bare steel, electrogalvanized, galvaneal and aluminum substrates.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW3011

GMW3059

GMW14270

2.3 Additional References. None.

3 Requirements

3.1 General Requirements. See GMW3011 for the generic approval requirements not listed in this specification. Materials meeting this specification must be dually approved to this standard and GMW3011 specifications. The requirements shall be met on all critical part surfaces, or as designated by the applicable product engineering documents.

3.2 All materials supplied to this standard must comply with GMW3059, **Restricted and Reportable Substances**, including the requirement to obtain a GM-approved International Material Data System (IMDS) submission.

4 Manufacturing Process

Not applicable.

5 Rules and Regulations

5.1 Legal Regulations. All materials must satisfy applicable laws, rules, regulations and recommendations valid in the country of usage.

5.2 Language. In the event of conflict between the English and domestic language, the English language shall take precedence.

5.3 Inspection and Rejection. Samples of components or materials released to a GM material specification shall be tested for conformity with the requirements of this material specification and approved by the responsible Engineering department prior to commencement of delivery of bulk supplies.

A new approval must be received for any changes, e.g., properties, manufacturing process, location of manufacture, etc. If not otherwise agreed, all testing and documentation normally required for initial release must be completed.

It is the responsibility of the supplier to inform the customer in a timely manner, without solicitation, and to include documentation of all modifications of materials and/or processes and to apply for a new release.

5.4 Material Safety Data Sheets/Safety Data Sheets (MSDS/SDS). For new product submissions, or when a change in chemical composition of an existing product has occurred, a complete copy of the Material Safety Data Sheet/Safety Data Sheet must be submitted in compliance with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) requirements or other country-specific MSDS/SDS requirements.

6 Approved Sources

Materials supplied to this specification must be approved by General Motors (Materials Engineering).

The appropriate GM Materials Engineering Department (Product Engineering or Manufacturing Engineering) must confirm materials as meeting the requirements of this specification. Only materials/sources listed in the GM Materials Approved Source List under this standard number have been qualified by Engineering as meeting the requirements of this standard.

Engineering qualifications of an approved source are required for this standard. Only sources listed in the GM Materials File (i.e., GM SupplyPower) under this standard number have been qualified by engineering as meeting the requirements of this standard. To access this list, reference GMW14270 for latest location.

7 Notes

7.1 Glossary. Not applicable.

7.2 Acronyms, Abbreviations, and Symbols.

GHS	Globally Harmonized System of Classification and Labeling of Chemicals
IMDS	International Material Data System
MSDS	Material Safety Data Sheet
SDS	Safety Data Sheet

8 Coding System

This standard shall be referenced in other documents, drawings, etc., as follows:

Material per 9984090

9 Release and Revisions

This standard was originated in February 1982. It was first approved by Fisher Body in March 1982. It was first published in March 1982.

Issue	Publication Date	Description (Organization)
1	MAR 1982	Initial publication.
2	OCT 1984	Issued (Fisher Body)
3	OCT 1985	Revise Source Approval List. Complete Revision. (GM Car and Truck Paint Engineering Groups)
4	JAN1990	Complete revision. (PC)
5	OCT 2003	Complete revision; new format. (Paint and Polymer Engineering)
6	NOV 2014	Revised to current template. (Manufacturing Engineering Vehicle Systems Paint and Seal Materials)
7	SEP 2019	Five year refresh project. (Vehicle Systems – Paint Materials and Facility)