



Phosphate Pre-Wipe Material

1 Scope

1.1 Material Description. This specification covers the requirements for a phosphate pre-wipe material that can be used to clean off drawing compounds, mill oils, sealants, etc., from metal surfaces. This material will be used in a pre-wipe area ahead of the phosphate system.

1.2 Symbols. Not applicable.

1.3 Applicability. These materials may be applied on a fully or partially assembled automobile or truck body with rags, Scotchbrite pads, etc., to remove contaminants prior to paint processing.

1.4 Remarks. Since the condition of the metal surface is critical to the proper performance of the phosphate, the materials used under this specification must not adversely affect the formation of the proper phosphate coating. Therefore, these materials are considered part of the metal pretreatment process and shall be supplied by the phosphate supplier in each plant. Any exceptions to this rule must be first approved by the appropriate GM Materials Engineering Department (Product Engineering or Manufacturing Engineering).

2 References

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

2.1 External Standards/Specifications.

ASTM D92

2.2 GM Standards/Specifications.

GMW3011

GMW3059

2.3 Additional References.

TMC003 Material Safety Data Sheet guidance documents (available at www.gmsupplypower.com).

3 Requirements

3.1 General Requirements. See the general phosphate specification, GMW3011 for additional requirements and requirement details not listed in this specification.

Note: All requirements for the pre-wipe shall be tested for performance versus a currently approved phosphate system without pre-wipe.

3.2 Panel Preparation. Must meet the requirements in GMW3011 under Test Panel Preparation and Accelerated Corrosion Testing. Perform these tests for all substrates listed in GMW3011 under Test Panel Substrates. The number of panels per test should be the same as that listed in GMW3011.

Note: Only Cold Rolled Steel (CRS) and Electrogalvanized (EG) need to be subjected to the Accelerated Corrosion Test.

3.3 Flash Point. See ASTM D92. These materials must have a flash point ≥ 90 °C.

3.4 Volatile Organic Compounds (VOC). Any qualified material must have a VOC level (of the concentrate) ≤ 06 kg/L.

3.5 Stability. Material shall be unaffected by normal storage periods and normal temperature variations.

3.6 Process Requirements.

3.6.1 Mixing. The compound must be a concentrate which can be applied to the body in a concentration ranging from full strength to a 1:3 dilution with plant water, to be specified by the supplier.

3.6.2 Functional Requirements. The material must perform satisfactorily in the specified production application. Failure to do so shall constitute reason for rejection regardless of compliance with the other requirements of this specification.

3.6.3 Quality Control Requirements. In addition to meeting all of the above detailed requirements, all subsequent lots of an approved compound will be required to meet the standards of composition established in the originally approved lot.

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. In addition, product MSDS/SDS submissions must be in compliance with specific country General Motors TMC003 Material Safety Data Sheet/Safety Data Sheet guidance documents where available.

5.5 All materials supplied to this standard must comply with the requirements of GMW3059, Restricted and Reportable Substances for Parts.

6 Approved Sources

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

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 File (MATSPC) under this standard number have been qualified by Engineering as meeting the requirements of this standard.

7 Notes

7.1 Glossary.

MATSPC: Global repository of GM approved materials for corresponding GM Engineering Standards.

7.2 Acronyms, Abbreviations, and Symbols.

CRS	Cold Rolled Steel
EG	Electrogalvanized
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
MSDS	Material Safety Data Sheet
PPAP	Production Part Approval Process
SDS	Safety Data Sheet