



Stone Chip Rating Scale - Plastics

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. The purpose of the rating scale is to allow comparison between test plaques and exterior trim components and provide consistency between personnel. It is important to recognize that rating stone chipping involves perception of an objectionable surface and much of the judgment is subjective. In developing the stone chip scales, an attempt has been made to provide some objective measures that will guide subjective judgment.

1.2 Applicability. This standard is used for rating vehicles, components or plaques that have been exposed to stone chipping. The standard provides examples of stone chip damage that are used to determine a stone chip rating.

1.3 Remarks. The Stone Chip Rating Scale Guidelines contain stone chip rating scales, rating guidelines, and photographs for the determination of stone chip severity on test plaques and exterior trim components. This includes, but is not limited to: mold in color (MIC) plastic, painted plastic and chrome plated plastic trim components. It is intended that the rating scales are used for sample evaluation for specification compliance, corporate chip inspections, as well as field surveys.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW3059

2.3 Additional References. None.

3 Requirements

3.1 Using the Rating Scales. The stone chip rating scale reflects the various degrees of stone chipping commonly found on test plaques and exterior trim components, and ranks them on a scale of 1 thru 10. A rating of 1 represents severe and extensive chipping, while a rating of 10 is no chipping or surface damage. There is no photographic standard for a rating of 10. The photographic guidelines associated with this scale include examples of all rating levels from 1 thru 9 (see 3.1.1).

3.1.1 Guideline Arrangement. The Guidelines are arranged in four (4) sections, each covering a different method of construction:

- MIC Black plastic (see Appendix A, Figures A1 thru A9)
- Painted plastic (Black) (see Appendix B, Figures B1 thru B9)
- Painted plastic (White) (see Appendix C, Figures C1 thru C9)
- Chrome plated plastic (see Appendix D, Figures D1 thru D9)

3.1.1.1 Rating Scale. Use this rating scale when rating stone impingement damage on test plaques and exterior trim components, such as rocker moldings, body side moldings, claddings, etc. Locate the worst area on the plaque or component being rated. Compare this area to the series of photographs in the applicable Appendix, (see 3.1.1) and select the comparable level for the rating. If the damage is more than a rating of 1, just state rating "less than 1" (i.e., < 1).

4 Validation

4.1 General. This rating scale supports the stone impact evaluation for any test plaque or exterior trim component. This includes, but is not limited to: MIC Thermoplastic Olefin (TPO), painted TPO, or chrome plated plastic.

4.2 Validation Cross Reference Index. Not applicable.

4.3 Supporting Paragraphs. Not applicable.

5 Provisions for Shipping

Not applicable.

6 Notes

6.1 Glossary. Not applicable.

6.2 Acronyms, Abbreviations, and Symbols.

MIC Mold in Color

TPO Thermoplastic Olefin

7 Additional Paragraphs

7.1 All parts or systems supplied to this standard must comply with the requirements of GMW3059, **Restricted and Reportable Substances**.

8 Coding System

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

GMW17456

9 Release and Revisions

This standard was originated in September 2015. It was first approved by the Body Exterior Trim GSSLT in April 2016. It was first published in May 2016.

Issue	Publication Date	Description (Organization)
1	MAY 2016	Initial publication.

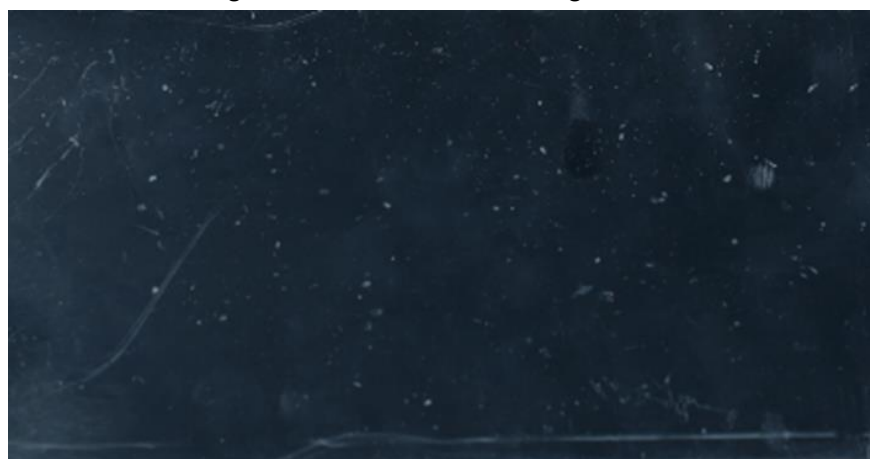
Appendix A: Mold In Color (MIC) Plastic Parts: Stone Chip Rating Scale**Figure A1: MIC Plastic: Rating Level 9****Figure A2: MIC Plastic: Rating Level 8****Figure A3: MIC Plastic: Rating Level 7**

Figure A4: MIC Plastic: Rating Level 6



Figure A5: MIC Plastic: Rating Level 5

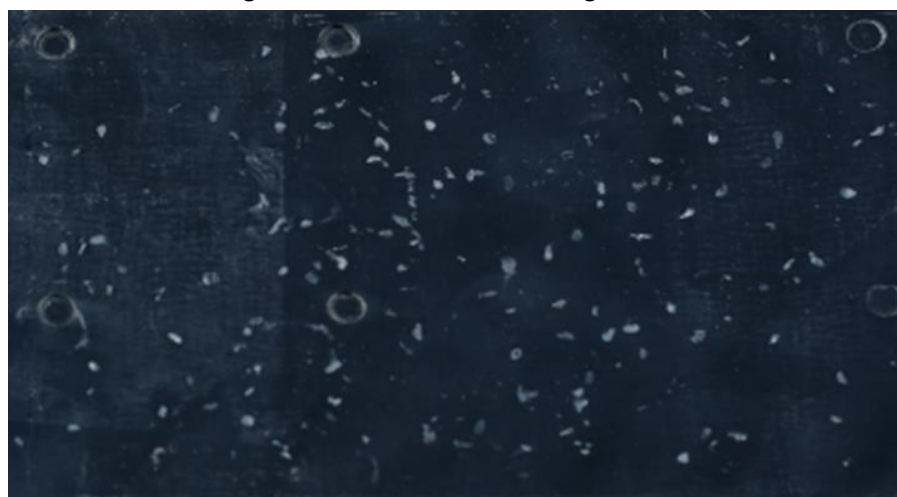


Figure A6: MIC Plastic: Rating Level 4

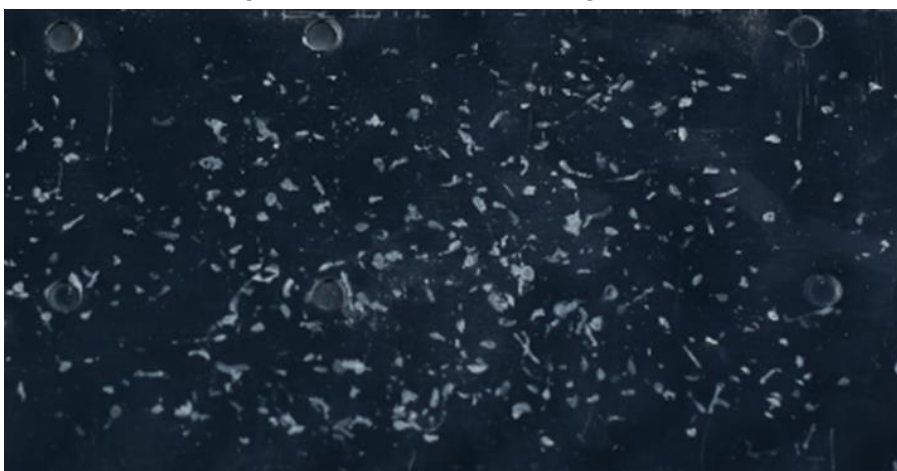


Figure A7: MIC Plastic: Rating Level 3

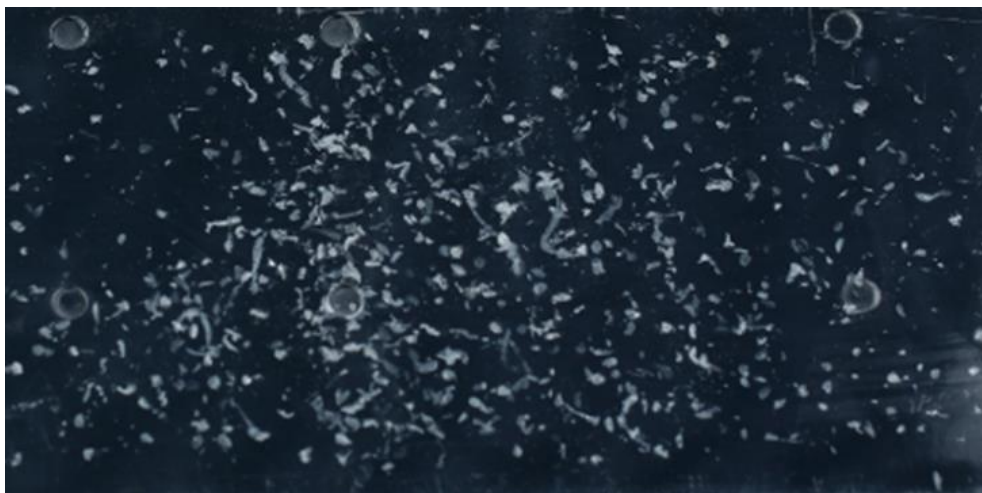


Figure A8: MIC Plastic: Rating Level 2

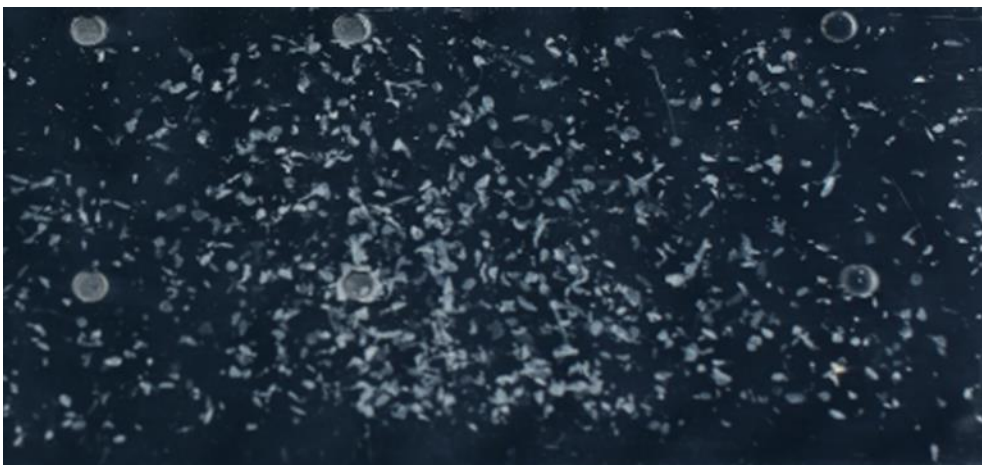


Figure A9: MIC Plastic: Rating Level 1

