

Visit Report J.V. (Thailand) Co., Ltd
Subject: Propose Grilamid TR for Roof Rack Base Cover
29 Oct 2019

To: ROOA

Cc: MEG, Jing Wang, HAMI, HEIP, YEMI, ZHOE, SASN, EMMA, AKIM

1 General

| | | |
|--------------|---|--|
| Customer | : | J.V. (Thailand) Co., Ltd |
| End User | : | Ford |
| Location | : | Chonburee, Thailand |
| Participants | : | JV : Mr.KK Lim General Manager Mr.Monti Suwannasing Design and product engineer Behn Meyer : Mr.Wisawat Sopakitiboon Sales Manager EMS : Mr.Piyawong Raya |
| Project name | : | New Ford Ranger |
| Application | : | Roof Rack Base Cover |
| Segment Code | : | 230 |
| Material | : | Grilamid TR90 UV (Metalic) |
| Potential | : | 8 tons/year |
| SOP | : | Q4/2020 |
| Competitor | : | ASA painting |

2 Target/Task

- To propose Grilamid TR90 UV.
- To show sample plate Grilamid TR grade.

3 Summary / Conclusion

- JV is looking non-painting material for Roof Rack Base Cover for new Ford Ranger.
- The approximate car volume 24,000 car/month.
- Roof Rack Cover is part to cover screw assembly portion for Roof Rack.
- The main requirement is material which can full fill weathering test 3,000 hours.
- RAYP mentioned Grilamid TR90 UV can't full fill the requirement at 3,000 hours however, JV will discuss with FORD to adjust the specification.
- JV has alternative solution with ASA + painting but difficult to find supplier to paint small part (3x3 mm).
- JV needs EMS to share current weathering test result for Grilamid TR90 UV.

- RAYP request JV to send test standard for Roof Rack.

4 Back ground information / Meeting detail

- JV is manufacturer for accessories interior and exterior of FORD.
- JV is looking for non-painting material for Roof Rack Base Cover.



Picture#1: Reference Roof Rack Base Cover portion

Molding trial details

➤ Subject 1

Situation

Adjustment

Conclusion

5 Discussion/Recommendation

- JV will inform test standard requirement.
- JV will discuss with Ford to adjust weathering test specifications.
- EMS provides current test result.
- EMS provide plate sample Grilamid TR90 UV metallic.

6 Measures

| No. | Measures | Resp. | Date |
|-----|---|-------|-----------|
| 1 | Provide current weathering test result Grilamid TR90 UV | RAYP | 4 Nov'19 |
| 2 | Order sample Grilamid TR90 UV metallic | ROOA | 16 Nov'19 |

7 Attachment

Best Regards,



Piyawong Raya
Application Development Engineer
Automotive, SEA