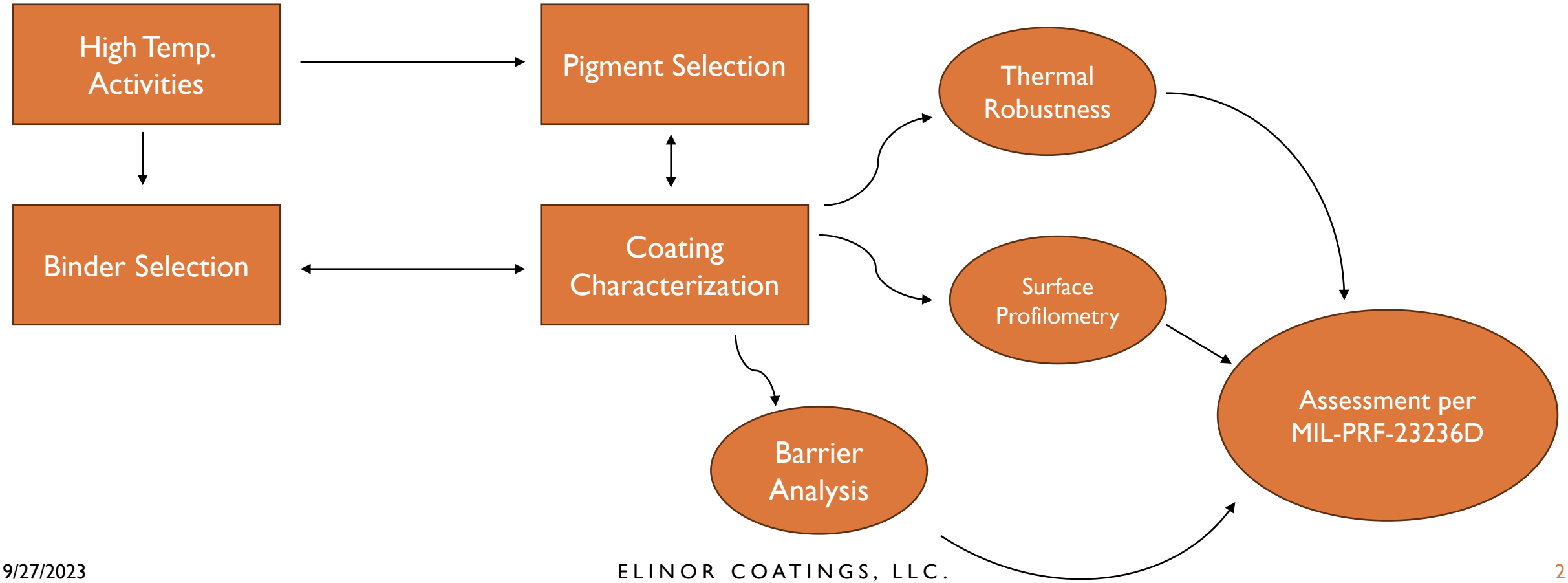
ULTRA HEAT RESISTANT PRIMER INTRODUCTION

DEVELOPMENT MAP FOR ULTRA HEAT RESISTANT PRIMER



TEST CONDITION ASSESSMENT

TEMPERATURE PROFILE COATED STEEL WELDING

Before Welding
19.9C (67.8F)

During Welding
244.3C (471.74F)

VISUAL ASSESSMENT

Commercial Control
After Welding

Elinor Formulation
After Welding

CURRENT STATUS

- Finalizing paperwork
- Selected chemistries of interest for the use at high T
- Selecting additives

- Starting formulations with partners (Northern and Fincantieri) for testing coupons generation
- Compiling testing evaluation criteria
  - High T resistance
  - Weathering
    - Immersion/corrosion testing

QUESTIONS REGARDING ULTRA HEAT RESISTANT PRIMER

- What is the allowable ΔE after high temperature exposure ?
- Any concerns regarding outgassing in reference to materials which are allowed in MIL-PRF-23236D ?
- What are some characteristics of an ideal Ultra Heat Resistant Primer which are not addressed by the current existing technology ?
  - i.e. application, major failure mechanisms