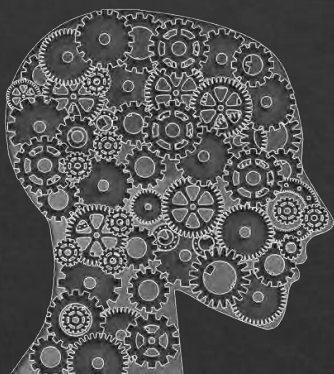


PRITM
ASPHALT

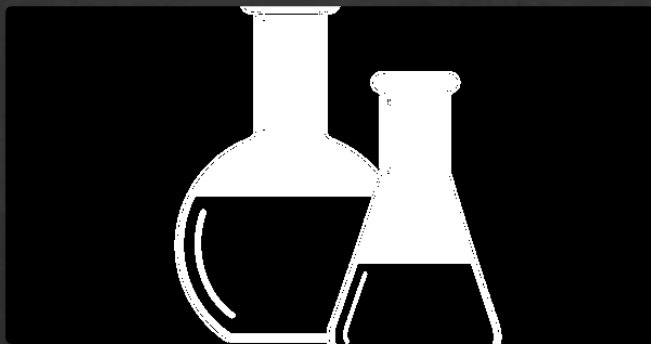
T E C H N O L O G I E S



Technical Support

**Over 60 Scientists,
Engineers, & Technicians**

**Trained in Federal, State,
ASTM, AASHTO & Foreign
Test Methods**



Certified

**Third-party compliance
testing.**

**Research and development
of pavement materials and
products.**



Laboratory Locations

- **PRI HQ – Tampa, FL**
- **PRI Midwest**
 - **Munster, IN**
 - **Chicago, IL**
- **PRI Int'l – Cadiz, Spain**



PRI does a comprehensive evaluation of binders to assess performance in both the field and in the laboratory. PRI also determines the optimum foundation for your mix.

PRI Benefits



Asphalt Binder Testing

Performance Grade

- Performance Grade M320 & M332
- Critical Cracking Temperature
- Delta Tc 20/40 hr
- Frequency Sweep
- Durability
- Elastic Recovery
- Master Curve
- Mix & Compaction Curves

Conventional

- Penetration Graded
- Viscosity Graded
- Distillations
- Oxidations

Modified Binders

- ❑ PMA's / PMB's
- ❑ Additives (PPA, GTR, Cross-Link, Resins) Extender Oils
- ❑ High/Low Shear Blending
- ❑ Fluorescence Microscopy
- ❑ Simulated Terminal Storage Stability
- ❑ Toughness & Tenacity
- ❑ Torsional Recovery



Supplemental Evaluations and Services

- ❑ Abson and Rotovap Recovery
- ❑ Colloidal Instability
- ❑ Corrosion Resistance
- ❑ Distillations
- ❑ Filler (TLA)
- ❑ Flash Points (COC, OMCC, Tag)
- ❑ Fraass Brittle Point
- ❑ Solubilities
 - ❑ (CS₂, Toluene, TCE, Heptane, Xylene)
- ❑ Spot Test
- ❑ Thermal Stability
- ❑ Wax
- ❑ SARA Fractions
- ❑ H₂S





Asphalt Pavement Services

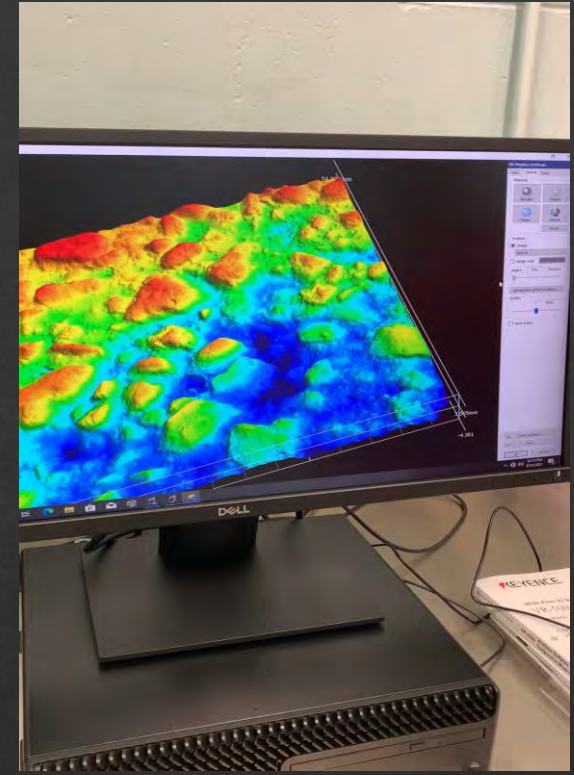
Solvent Extractions for Recovered Binder Testing:



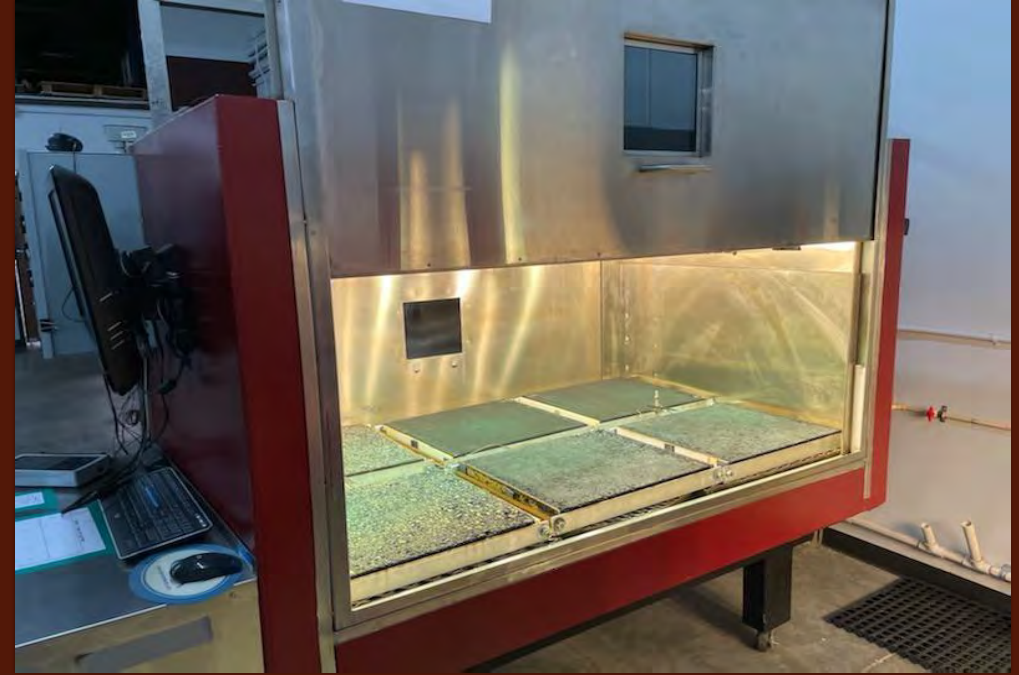
- ❑ Asphalt Rubber Binders (ARB's)
- ❑ Conventional (Viscosity and Penetration Grade)
- ❑ PG Plus
- ❑ Recycling Agents (RA Grades)
 - ❑ RAP & RAS

Pavement Services Performance Testing

- ✓ Dynamic Modulus and Flow
- ✓ APWS
- ✓ Beam Fatigue
- ✓ Bond Shear Strength
- ✓ DC_n
- ✓ Dynamic & Static Creep
- ✓ EAR's
- ✓ Thermal Cracking
- ✓ Hamburg and APA Rut Analysis
- ✓ Moisture Sensitivity (TSR)
- ✓ Permeability
- ✓ Resilient Modulus
- ✓ Semi-Circular Bend (I-FIT & J_c)
- ✓ Structural Number
- ✓ Tensile Properties (IDT)
- ✓ Texas Overlay
- ✓ ΔT_c (Thermal Cracking)



Latest Technological Equipment



The Asphalt Pavement Weathering System

Replicates environmental aging in an accelerated manner.



Simulated UV Exposure

- ❑ Simulates natural sunlight
 - ❑ UVA
 - ❑ UVB
 - ❑ Visible
 - ❑ Infrared radiation
- ❑ The use of specialty bulbs maintain a natural sunlight effect.

- ❖ Environmental Capabilities
 - ❖ Water Rate & Temp controlled
 - ❖ Runoff water collection or leachate determinations
- ❖ Flexibility of Specimen Morphology



Testing Services to Improve Recycling & Sustainability

SUSTAINABILITY

Recycling & upcycling of asphalt-based paving & roofing products are essential to our economy.

ENVIRONMENTAL IMPACT

Products containing recycled materials are not tested for their effects on the environment.

ENVIRONMENTAL IMPACT

Products containing recycled materials are not tested for their effects on the environment.

PRI's Analytical Lab coupled with our APW (Asphalt Pavement Weathering System) is a means to determine if environmental issues may develop in the products life-cycle.

Sustainability for Future Pavements



Recyclables

Additional products can be added:

- ❑ Plastics
- ❑ Elastomers
- ❑ Tire Rubber



Aggregates

Tests allow for the recycled use of:

- ❑ Recycled Asphalt Shingles (RAS)
- ❑ Recycled Asphalt Pavement (RAP)
- ❑ TR (Tire Rubber Additions)



Infrastructure

Benefits from Understanding Asphalts age:

- ❑ Reduced road repairs
- ❑ Saves time and fuel associated with road repair.
- ❑ Better utilization of tax dollars.



Additional Services and Offerings

- ❑ Consulting
- ❑ Intellectual Property Assistance
- ❑ Training
- ❑ Technical Literature
- ❑ Referee Testing





VALIDATION PROGRAM

The PRI Validation program ensures that company products are tested, reviewed, and verified to pass under ISO/IEC Accreditation standards.

A signature certificate is registered to that product once tested and approved.

CONTACT US

Ken Grzybowski

Kgrzybowski@priasphalt.com

Lisa Garrison

LGarrison@priasphalt.com

P: 813.621.5777

www.priasphalt.com

