



fill up. feel good.

Ethanol & E85 Material Compatibility

Materials Reactive to Ethanol and E85

Incompatible Metals:

- | | |
|-------|--|
| Zinc | Aluminum |
| Brass | Terne (lead-in alloy common in older OEM fuel tanks) |
| Lead | Lead-Based Solder |

Incompatible Non-Metallic Materials:

- | | |
|----------------------|---------------------------------------|
| Natural Rubber | Polyvinyl Chloride (PVC) |
| Polyurethane | Polyamides |
| Cork Gasket Material | Methyl-Methacrylate Plastics |
| Leather | Polyester-Bonded Fiberglass Laminates |

Materials Compatible with Ethanol and E85

Compatible Metals:

- | | |
|-----------------|------------|
| Unplated Steel | Black Iron |
| Stainless Steel | Bronze |

Compatible Non-Metallic Materials:

- | | |
|--|---------------------|
| Thermoset Reinforced Fiberglass (as UL listed) | Polypropylene |
| Thermoplastic Piping | Nitrile |
| Buna-N | Viton [®] |
| Neoprene Rubber | Teflon [®] |

Note: This information is contained in the *Handbook for Handling, Storing, and Dispensing E85* from NREL (National Renewable Energy Laboratory). The complete document can be obtained at http://www.ethanol.org/pdf/contentmgmt/ethanol_guidebook.pdf