

# Product Data Sheet

## Unleaded E10 Petrol (Gasoline)

### Description

*Puma Unleaded E10 is petrol grade with a minimum Research Octane Number (RON) of 91. Puma Unleaded E10 meets the Fuel Quality Standards Act 2000 and Fuel Quality Standards (Petrol) Determination 2019 as amended.*

### Compatibility

Unleaded 10 is an Unleaded 91 based fuel blended with 10% ethanol. Ethanol is a high octane blend component, which results in a typical research octane number (RON) of 94.

If you are not sure if it can run on Unleaded E10, check with your manufacturer first before using.

### Storage

Keep away from sources of ignition.  
Packages should not be stored above 40°C.

All packages should be kept locked up,  
containers tightly closed and stored in a cool,  
well ventilated place.

### Health, Safety & Environment

Unleaded E10 is extremely flammable and is  
classified as a Transport Hazard Class 3 Liquid

This product presents a serious health risk by  
prolonged exposure through inhalation, skin  
contact and if swallowed.

Full health, safety and environmental  
information is provided for this product in the  
relevant Safety Data Sheet, which can be  
obtained on our website.

[www.pumaenergy.com.au](http://www.pumaenergy.com.au)

## Unleaded E10 Specifications

Test Description	Test Method	Unit	Specification
Research Octane Number, RON	ASTM D2699		91.0 min
Motor Octane Number, MON	ASTM D2700		81.0 min
Lead Content	ASTM D3237	mg/L	5 max
Aromatics Content (Total)	ASTM D1319	vol%	45.0 max
Olefins Content	ASTM D1319	vol%	18.0 max
Oxygenates			
MTBE	ASTM D4815	vol%	1.0 max
ETBE	ASTM D4815	vol%	1.0 max
DIPE	ASTM D4815	vol%	1.0 max
TBA	ASTM D4815	vol%	0.5 max
Oxygen Content	ASTM D4815	m/m%	3.9 max
Existent Gum, Washed	ASTM D381	mg/100mL	5 max
Induction Period	ASTM D525	Minutes	360 min
Sulphur Content	ASTM D5453	mg/kg	150 max
Distillation Final Boiling Point	ASTM D86	°C	210 max
Benzene Content	ASTM D5580	vol%	1.0 max
Phosphorous Content	ASTM D3231	mg/L	1.3 max
Copper Corrosion, 3hrs @ 50°C	ASTM D130		Class 1 max

## Ethanol Specifications

Test Description	Test Method	Unit	Specification
Acidity—as acetic acid	ASTM D7795	m/m%	0.006 max
Appearance	ASTM D4806		Clear and bright and visibly free of suspended or precipitated contaminants
Copper	EN 15837 (as modified in CEN/TS 15293)	mg/kg	0.1 max
Denaturant	ASTM D5501	vol%	1 – 1.5
Ethanol	ASTM D5501	vol%	95.6 min
Inorganic chloride	ASTM D7328	mg/kg	10 max
Methanol	ASTM D5501	vol%	0.5 max
pHe	ASTM D6423		6.5 - 9.0
Solvent washed gum	ASTM D381	mg/100 mL	5 max
Sulfate	ASTM D7328	mg/kg	4.0 max
Sulfur	ASTM D5453	mg/kg	10 max
Water	ASTM E1064	m/m%	1 max

