
We recently celebrated the anniversary of the Apollo 11 moon landing — a monumental achievement for both American ingenuity and human curiosity.

Putting boots on lunar dirt was a genuine feat, one that required the greatest scientific minds of their age, constant innovation and billions of dollars. It also required liquid fuels and petrochemicals.

The Saturn V rocket was powered by a kerosene-based fuel called RP-1, while Neil Armstrong's space suit was built from no less than 21 layers of synthetic materials, including reflective insulation and protective outer layers [made from petrochemicals](#). Even his visor was manufactured from a specific polycarbonate derived from petrochemical building blocks.

Without liquid fuels, Saturn V would have never broken free from Earth's orbit. Without petrochemicals, Neil Armstrong would have never taken that small step.



But the moon landing was only the beginning. Humanity will, one day, walk on Mars and explore the far reaches of our solar system (and beyond). When we do, every life-changing discovery will be made possible by the fuels and materials made by America's refiners and petrochemical manufacturers.

The infographic features a central image of an astronaut in a white spacesuit floating in space. Yellow lines connect specific parts of the suit to callout boxes. The AFPM logo is in the top left. The callouts include: 'aluminized mylar inner layer' with 'INSULATION AGAINST COLD' and chemical structures for Ethylene and Xylene; 'polycarbonate plastic visor' with 'EYE PROTECTION' and a chemical structure for Propylene; and 'kevlar outer layer' with 'RESISTANT TO PUNCTURES' and a chemical structure for Xylene.

AFPM
American
Fuel & Petrochemical
Manufacturers

aluminized mylar
inner layer
INSULATION AGAINST COLD

Ethylene

Xylene

polycarbonate
plastic visor
EYE PROTECTION

Propylene

kevlar outer
layer
RESISTANT TO PUNCTURES

Xylene

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About AFPM:

The American Fuel & Petrochemical Manufacturers (AFPM) is the leading trade association representing the makers of the fuels that keep us moving, the petrochemicals that are the essential building blocks for modern life, and the midstream companies that get our feedstocks and products where they need to go. We make the products that make life better, safer and more sustainable — we make progress.

Topics

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