WHAT ARE LEGO BRICKS MADE OF?

LEGOS BRICKS

Up until 1963, cellulose acetate was used to make Lego bricks and parts. Lego bricks are now made from acrylonitrile butadiene styrene (ABS). ABS is less subject to warping and colour fading.

LEGO BRICKS FORMULA:

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\text{ABS} = \text{CH}_3 \text{C} = \text{C} - \text{CH} = \text{CH}_2 \text{C} = \text{C} - \text{CH}_2 \text{CH}_2 - \text{CH}_2 \text{C} = \text{C} - \text{CH} = \text{CH}_2 \text{C} = \text{C} - \text{CH} = \text{CH}_2 \text{C} = \text{C} - \text{CH} = \text{CH}_2
\]

HOW LEGO IS MADE

1. ABS GRANULES ADDED
2. GRANULES HEATED TO 230°C (450°F)
3. MELTED PLASTIC FED INTO MOLDS
4. Macrolex dyes are added to ABS to colour it.
5. In 2014 more than 60 billion Lego pieces were made.

OTHER LEGO PARTS

ABS is opaque, so a polycarbonate polymer has to be used for transparent Lego parts. For leaves, bushes and trees, Lego has recently started using polyethene derived from sugar cane.

Tyres and elastic materials are made from styrene butadiene styrene (SBS).