

# **CHEMISTRY IN OUR LIFE**

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# Why is chemistry important?

Chemistry impacts on our everyday lives through:

- soaps, shampoos and detergents to keep us clean
- disinfectants and pharmaceuticals to safeguard health
- additives to foods to keep them fresher longer
- paints to protect and extend the life of metal and timber
- insulation materials to save energy in buildings
- the fuel we put in our cars

# Examples of Organic Compounds



Paper  
(Cellulose)



Nail Polish  
(Nitrocellulose, butyl acetate)



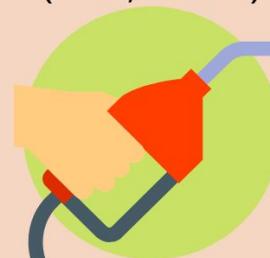
Candle  
(Wax, tallow)



Fabric  
(Cellulose, nylon, rayon)



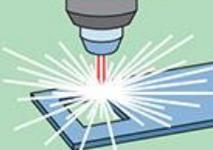
Soap  
(Fatty acid salt)



Gasoline  
(Mixed hydrocarbon)

sciencenote

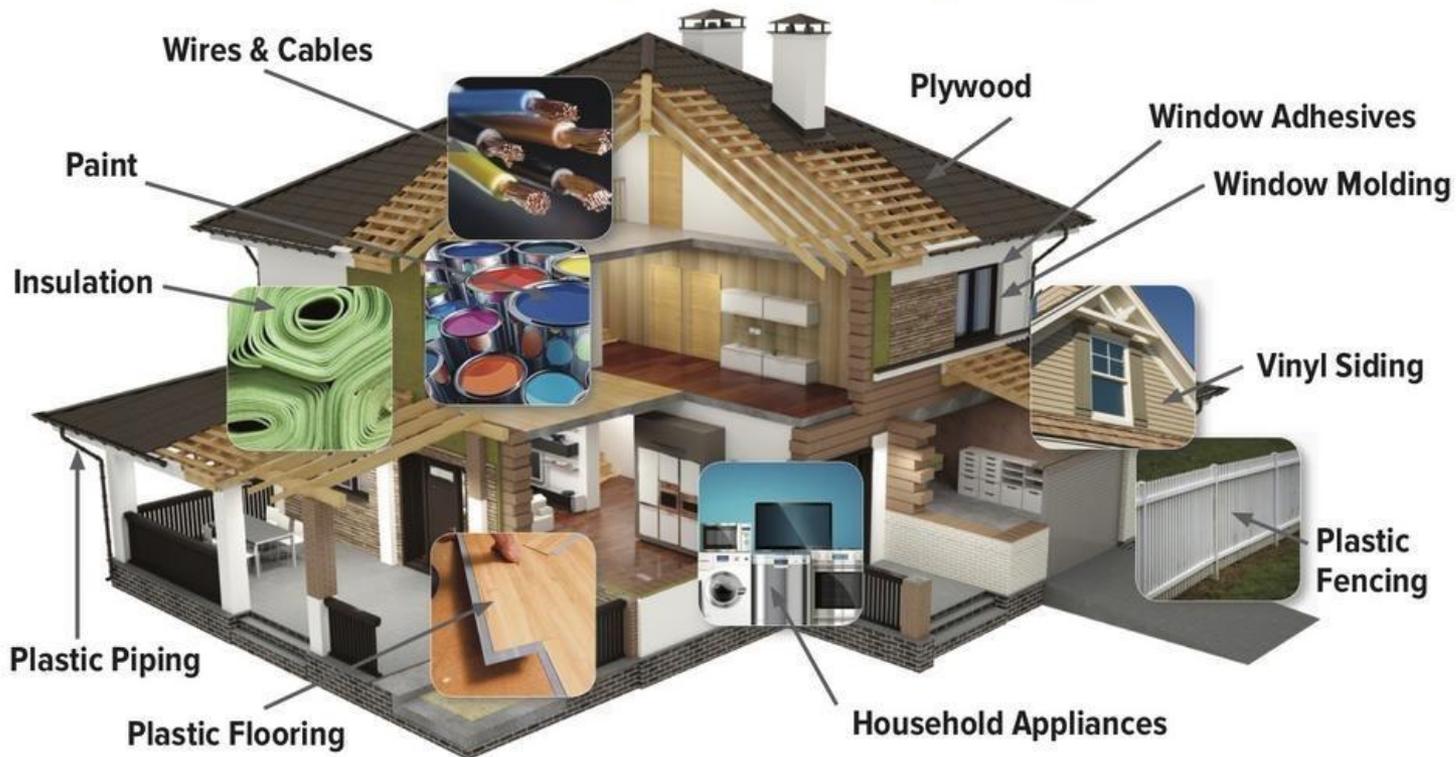
**Chemistry impacts on our everyday lives through:**

<p><b>K</b> 19 <b>Potassium</b></p>  <p>Fruits and Vegetables</p>	<p><b>Ca</b> 20 <b>Calcium</b></p>  <p>Shells and Bones</p>	<p><b>Sc</b> 21 <b>Scandium</b></p>  <p>Bicycles</p>	<p><b>Ti</b> 22 <b>Titanium</b></p>  <p>Aerospace</p>	<p><b>V</b> 23 <b>Vanadium</b></p>  <p>Springs</p>
<p><b>Rb</b> 37 <b>Rubidium</b></p>  <p>Global Navigation</p>	<p><b>Sr</b> 38 <b>Strontium</b></p>  <p>Fireworks</p>	<p><b>Y</b> 39 <b>Yttrium</b></p>  <p>Lasers</p>	<p><b>Zr</b> 40 <b>Zirconium</b></p>  <p>Chemical Pipelines</p>	<p><b>Nb</b> 41 <b>Niobium</b></p>  <p>Mag Lev Trains</p>
<p><b>Cs</b> 55 <b>Cesium</b></p>  <p>Atomic Clocks</p>	<p><b>Ba</b> 56 <b>Barium</b></p>  <p>X-Ray Contrast</p>	<p><b>57 - 71</b></p> <p>Rare Earth Metals</p>	<p><b>Hf</b> 72 <b>Hafnium</b></p>  <p>Nuclear Submarines</p>	<p><b>Ta</b> 73 <b>Tantalum</b></p>  <p>Mobile Phones</p>

# Smart chemistry

Chemistry provides utility and durability to the building and construction industries. Building materials make our homes more reliable and energy efficient every day.

# Smart Chemistry in Everyday Life



Chemistry provides utility and durability to the building and construction industries. SI Group products are found in several building materials that make our homes more reliable and energy efficient every day. Learn more at [www.siigroup.com](http://www.siigroup.com)

**SI Group**  
The Substance Inside

# Conclusion

Chemical reactions influence the stuff around us and there are numerous instances where chemicals and chemistry helps us live a better life. The cooking of food, the clothes we wear, fertilizers that we use for crops, cement used for building our houses, the power plants that generate electricity, and many other processes depend on chemistry. The human dependence on this natural science is increasing and to understand this, here are a few examples that highlight the importance of chemistry around us.