

IMAFLOW[®] SILICONE TUBING IN COFFEE VENDING MACHINES

RAPID EXPANSION OF COFFEE VENDING MACHINES

The increasing demand for convenient, on-the-go coffee options has generated enormous growth in the market for coffee vending machines in recent years. In a wide range of settings, such as businesses, airports, hospitals, and public spaces, these machines provide customers with a quick and hassle-free method to enjoy a freshly brewed cup of coffee. Coffee vending machines rely on trustworthy and prolonged components, such as silicone tubing, to meet the rigorous requirements of this sector.



ADVANTAGES OF SILICONE TUBING

Silicone is commonly advised for use in coffee machines due to its unique properties that make it well suited for handling the specific requirements of coffee preparation. Here are some reasons why silicone is often preferred over other materials:

- **Heat Resistance:** The use of silicone tubing helps to ensure safe and effective operation because it can endure the high temperatures involved in brewing and delivering hot coffee without melting or deforming.
- **Flexibility and Durability:** Due to its great flexibility and durability, silicone tubing is simple to install and replace in vending machines. Its adaptability enables effective routing and connecting to various machine components.
- **Chemical Resistance:** Because of its outstanding chemical and moisture resistance, silicone is compatible with the cleaning solutions and coffee used in the machine. It stops any negative reactions that can harm the beverage's flavour or quality.
- **Hygienic and Tasteless:** Since silicone tubing is non-toxic, odourless, and tasteless, the flavour of the coffee is guaranteed to not change while it is being dispensed. Due to its resistance to bacterial growth and simplicity of cleaning, it also provides a hygienic option.
- **Longevity:** Operators of coffee vending machines can save money on maintenance and replacement because silicone tubing has a long service life.
- **Inertness:** Silicone is a substance that does not react with or release any significant compounds into the fluids it comes into contact with, making it an inert substance. This characteristic makes sure that interactions with the tubing material won't affect the coffee's flavour or quality. Additionally, it reduces the possibility of adding any undesirable tastes or odours to the coffee.
- **Smooth Surface:** The inside surface of silicone tubing is smooth, making it simple to clean and maintain. This smoothness ensures superior cleanliness and prevents the contamination of following brews by lowering the chance of residue buildup, bacterial growth, or mold formation.
- **Food-Grade Certification:** Silicone has been given regulatory bodies' approval for food contact and has attained food-grade certification. This accreditation provides assurance to manufacturers and customers by confirming its security and compatibility for use with consumable substances like coffee.

CHALLENGES WITHOUT SILICONE TUBING

Have you ever wondered what challenges can be faced if coffee vending machines don't use Silicone Tubing.

- Due to the availability of alternatives, a machine to make coffee may encounter a number of challenges if silicone tubing is not used. Here are some possible problems:
- **Compatibility:** Choosing a tubing material that is compatible with the water, steam, or coffee used in a coffee maker is essential. If the tubing material is unsuitable for these liquids, it could deteriorate, leach dangerous compounds, or otherwise have an impact on the coffee's flavour and quality.
- **Temperature Resistance:** Steam and hot water are frequently used in coffee makers. Because of its high-temperature resistance, silicone tubing is frequently used to transport hot liquids. Alternative tubing materials may bend, shatter, or even melt if they are not sufficiently temperature resistant, creating leaks and possible safety risks.



- **Flexibility and Durability:** Silicone tubing is very flexible, enabling it to bend and conform to the design and specifications of the coffee maker. Additionally, it offers decent toughness and resistance to damage. The machine's performance may be limited and frequent replacements or repairs may be necessary if the chosen tube material is less flexible or prone to damage.
- **Flavour and Odour:** Some tube materials might give the coffee an unfavourable flavour or odour, which lowers the quality of the beverage. In general, silicone tubing is said to be inert and has no discernible taste or odour. The use of an alternate substance that reacts with the coffee could lead to a bad drinking experience.
- **Hygiene and cleanliness:** Smooth inner surfaces of silicone tubing make it simple to maintain hygienic standards. It could be harder to clean and easier for coffee stains, bacteria, or mould to accumulate if the material is porous or has a rough surface. Subsequent brews' flavours may be impacted, and there may be health hazards.

Ami Polymer offers Imaflow® Platinum cured silicone tubing that has been developed particularly for coffee machine makers and satisfies the necessary criteria; it comes highly recommended. Imaflow® Platinum cured silicone tubing might have passed extensive testing and certification procedures to guarantee its suitability for applications involving coffee makers. When comparing silicone tubing for coffee makers, it is critical to take into account elements like temperature resistance, flexibility, inertness, ease of cleaning, and food-grade safety certification.



IMAFLOW® PLATINUM CURED SILICONE

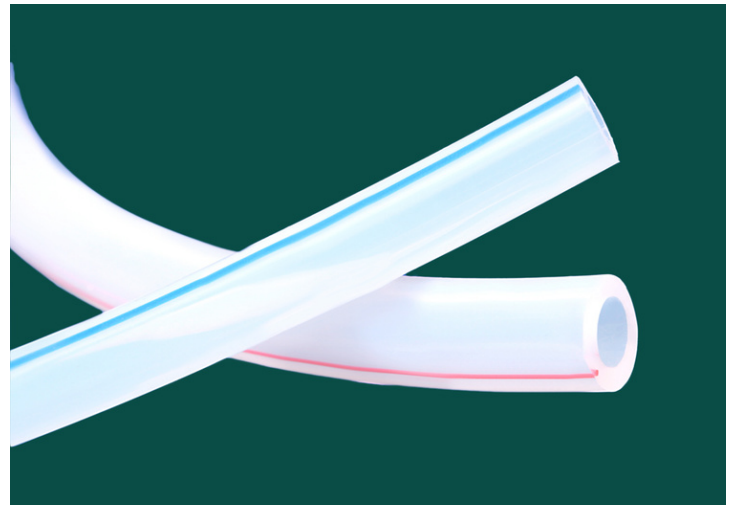
IMAFLOW® PLATINUM CURED COLOR-CODED SILICONE TUBING BENEFITS

Adding to this we understand how significant and important the colour-coded tubing is in the coffee vending machine. Ami Polymer offers colour-coded tubing specifically designed for coffee vending machines, recognizing the importance of easy identification and differentiation of tubing lines which comes with various benefits to make the process smooth:

- **Visual Differentiation:** The coffee vending machine's color-coded tubing makes it simple and quick to identify the various fluid lines. This visual contrast guarantees proper tube routing and attachment while assisting in the prevention of cross-contamination.
- **Effective Maintenance and Troubleshooting:** Maintenance staff can quickly identify and resolve problems with particular fluid lines thanks to color-coded tubing. This streamlines the upkeep procedure, cuts downtime, and boosts overall effectiveness.
- **Improved Safety and Compliance:** Using color-coded tubing in coffee vending machines encourages safety and adherence to rules and regulations set forth by the industry. It lowers the possibility of inappropriate connections, potential risks, and regulatory non-compliance by clearly stating the purpose of each line.
- **Simplified Installation and Replacement:** Color-coded tubing makes the installation or tube replacement procedure simpler by offering unambiguous visual cues. This shortens the time needed for tubing replacement and ensures correct and effective installation while minimizing errors.
- The color-coded tubing for coffee vending machines from Ami Polymer is intended to improve operation, safety, and upkeep simplicity. It promotes effective operation and reduces the risk of errors by enabling operators and technicians to recognize and work with various fluid lines.

CERTIFICATIONS OF IMAFLOW® PLATINUM CURED SILICONE TUBING

- NSF-51 Certification on Resin
- FDA 21 CFR 177.2600
- Phthalate/Bisphenol Free COA
- RoHS Certification
- TSE/BSE Certification
- Acute Systemic Toxicity Test (USP Class VI)
- Intracutaneous Toxicity Test (USP Class VI)
- Implantation Test (USP Class VI)



FEATURES OF IMAFLOW® PLATINUM CURED SILICONE TUBING

Some important features of Imaflow® Platinum cured silicone tubing

- The tubing is manufactured using platinum-grade silicone rubber.
- The tubing is manufactured and packaged in a cleanroom facility of class 10000, which has been audited by TUV Nord.
- The tubing offers superior fluid transfer characteristics compared to peroxide silicone tubing.
- The tubing is available with FDA-approved silicone-based color coding.
- The tubing provides enhanced transparency and an extended shelf life when compared to peroxide tubing.
- The tubing is free from any heavy metals and hazardous substances.

THE COMPANY BELIEVES IN "BE IN BUSINESS WITH ETHICS" AND ASSURE QUICK DEVELOPMENT, FASTEST DELIVERY, ULTIMATE QUALITY AND ALSO VERY COMPETITIVE RATES.



Manisha Boga

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Ami Polymer

"Sealing Expert in Silicone"

