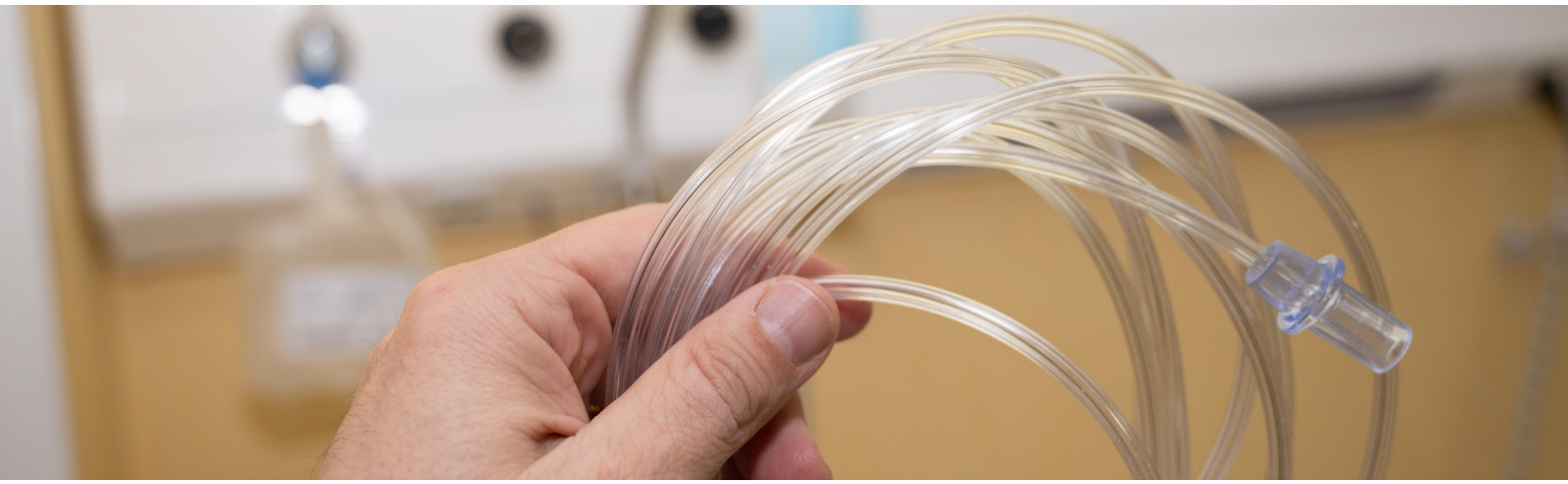
ExxonMobil
Signature Polymers

Machine run sheet



Vistamaxx™ performance polymers

ExxonMobil Signature Polymers collaborates with COLLIN offering full polyolefin solutions for IV tubes to meet rigorous industry standards

High transparency | **Low kinking** | **Excellent processability**

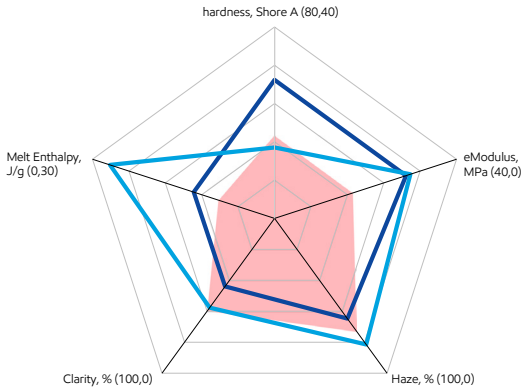
Data and results presented herein apply specifically to the noted application under this machine run sheet.
Your results may differ depending on factors such as operating conditions, equipment and materials used.

Styrene-Ethylene-Butylene-Styrene (SEBS) and silicone are emerging as PVC alternatives in medical devices and pharmaceutical packaging, but both materials can be difficult to recycle and SEBS needs compounding. ExxonMobil Signature Polymers collaborated with COLLIN to develop a full polyolefin approach to address the challenge. Featuring Vistamaxx™ performance polymers and Exact™ polyolefin elastomers, the solution enables the production of IV tubes that can be used in formulations designed for recyclability*.

Tailored formulations to meet diverse industry needs:

- **Formulation 1:** Vistamaxx™ 6102 + Exceed™ PP9122, offers **excellent flexibility** and **strong optical** properties
- **Formulation 2:** Vistamaxx™ 6102 + Exact™ 5061, designed to **enhance flexibility** even further while maintaining good transparency
- **Formulation 3:** Exact™ 5061, a pure elastomer solution ideal for applications where **optical clarity** is the top priority

The spider chart illustrates how each formulation performs across key attributes.



Formulation 1: 90% Vistamaxx 6102MED / 10% ExxonMobil PP9122MED
Formulation 2: 80% Vistamaxx 6102MED / 20% Exact 5061
Formulation 3: 100% Exact 5061

Graph: Mechanical and optical differences of Vistamaxx 6102MED, PP9122MED versus Vistamaxx 6102MED, Exact 5061 blends and pure Exact 5061 - Data from tests performed by or on behalf of ExxonMobil.

Read the factsheet

*Design features intended to support recyclability. Actual recyclability depends on factors such as local collection, sortation, and recycling infrastructure, as well as the condition and configuration of the product after use. However, access to facilities that accept and process plastic medical waste is limited and not widely available.

COLLIN MEDICAL LINE Tube Lines

COLLIN tube lines are used for the production of multi-lumen resp. plastic tubes for medical applications, also multi-layer.

The spectrum of diameters ranges from thinner than a human hair (<100 µm) up to approx. 5 mm. By means of coextrusion, the properties of the tubes, with a design of up to 5 layers, are adapted to the requirements of the field of applications.

The inner geometry of COLLIN MEDICAL LINE tubes ranges from simple mono-lumen up to multi-lumen tubes, which contain up to seven channels, which are separated from each other. It is clear that all geometric parameters are extremely, narrowly tolerated. This geometric variety is multiplied by using different plastics.

Furthermore, polymer materials can be combined with metallic supporting bodies with different, geometric characteristics.

Advantages

- Up to 5 layers
- Up to 7 separate channels
- Enormous variability in production
- Continuous production, compliance with all tolerance requirements
- Lines, which can produce around the clock
- Highly tempered stainless steel (316L) for all product-touching parts
- Standard-compliant surfaces

Applications

- Minimally invasive surgeries
- Dialysis tubes
- Infusion tubes
- Catheter tubes
- Drainage tubes etc.

COLLIN MEDICAL LINE

Highest precision, narrow tolerances, cleanliness, process accuracy, good handling of cleaning, clean room conformity, fast and excellent service and customised client trainings are a matter of course.

- Built according to the specifications of FDA 21 CFR, ISPE, ISO 13485, DIN EN 10204/3.1B, cGMP/GMP; Construction and design conform to hygienic standards
- All installations are easy to dismantle and clean
- Enormous variability for producing different products
- Development work for customers as well as preliminary test in the COLLIN Lab
- Standardized validation, qualification and documentation
- SCADA software solutions according to GAMP Guideline.

Extras / Features

- Cutting devices
- Winder
- Teflon coatings for hoppers
- Cooling conveyors
- Dosing lines
- Several screws depending on polymer/material
- Individual solutions like cooling baths
- Water-cooled control cabinets

COLLIN at K2025. Hall 9 / Stand B16.
collin-solutions.com/en/