



Safety
Medical Care
Health
Certification
Technique
Honest



for **Medical Applications**
NAN YA PVC  Compounds

by **NAN YA PLASTICS CORPORATION**

We are your best partner



Formosa Petrochemical Park of Taiwan

PROFILE

Nan Ya Plastics Corporation, a member of the Formosa Plastics Group (FPG), was found in 1958. We believe that a good management foundation is critical to the stable and efficient operation of an enterprise. At Nan Ya Plastics Corporation, our culture is to operate on this basis of evidence and facts. Moreover, honesty and sustainability also sit at the heart of our business strategy. These principles are what has continued to drive Nan Ya forward. Indeed, Nan Ya has continued to be a successful corporation as reflected by our reputation and excellence in all of our products.

Nan Ya have a primary focus on four specific domain of products: plastics, petrochemical, electronic materials and polyester fibre products. We have been producing PVC compounds at Jen- Wu plant in Kaohsiung since 1973 and we acquired ISO 9001, 14001, 18001 and 13485 certification.



Jen- Wu Plant in Kaohsiung

LOOKING AHEAD

We are a dedicated and professional company that value integrity and sustainability highly. Our continued effort into the development of body catheter and blood transfusion system bags all contribute to our expanding range of products. We value the needs of our customer highly and with our technologies and understanding of plastics manufacturing, we have the utmost confidence that we can provide solutions for all our customers in global.



Formosa Headquarter of Taipei

REGULATION & STANDARD

The PVC compounds R&D team follow stringent guideline and we select only the raw materials that have been subject to rigorous and thorough evaluations. They must also have met the criteria set out by the European Pharmacopoeia, ISO 10993 and USP VI specifications. We believe that the high standards that we adapt ensures that the products we provide are safe and high in quality.



CAPACITY & QUALITY

Our annual production capacity of PVC compounds is 60,000 tonnes capable of meeting the demands of volume orders. Together with our state-of-the-art techniques and equipments our plastics processing is unmatched by our competitors. Moreover, our strict testing protocols and rigorous evaluation by the overseeing management body and R&D team all contribute to the final product that is consistent, high in quality and reliable.

APPLICATIONS

Our medical compounds are suitable for extrusion, injection and blow moulding processing technology. Our product range is adapted to meet the application requirement of our customers. Whether it is different needs of hardness or customization of products for special-purpose. We always endeavour to meet our customers' needs. All our products are suitable for ETO sterilization and our production recipes can be adapted to meet the requirements for steam and gamma sterilization.

Product applications include:

- Urinary Collection Tube and Catheter.
- Infusion Set, Tube, Soft Container.
- Hemodialysis, Blood Line and Component.
- Feeding System, Nutrition Container.
- Laryngeal Airway, Mask, Oxygen Tube, Resuscitator.
- Blood Contact Transfusion System Bag.

PHTHALATE FREE COMPOUNDS FOR MEDICAL DEVICES

Our non-toxic specifications to meet the requirements of European Pharmacopoeia, ISO 10993 and USP class VI which are suitable for both process of extrusion and injection.

(Representative products)

| FOR EXTRUSION | | Hardness | Specific Gravity | Tensile Strength | Elongation |
|------------------------|----------------------------------|-----------|-------------------|--------------------|------------|
| | | ISO 868 | ISO 1183 | ISO 527 | ISO 527 |
| Product Code | Applications / Enduse | Shore A&D | g/cm ³ | kg/cm ² | % |
| SE 085 H36 | Hemodialysis Tubes / Blood Lines | A 66 ±3 | 1.18 ±0.02 | 166 | 434 |
| SA 075 3X6 | Urine Collection Tubes | A 72 ±3 | 1.19 ±0.02 | 167 | 427 |
| SA 060 3X6 | Hemodialysis Tubes / Blood Lines | A 77 ±3 | 1.20 ±0.02 | 184 | 394 |
| SA 062 P36 | Oxygen Tubes | A 80 ±3 | 1.21 ±0.02 | 202 | 371 |
| SA 056 3X6 | Urine Collection Tubes | A 83 ±3 | 1.22 ±0.02 | 213 | 386 |
| SC 050 3X6 | Soft containers / Infusion | A 85 ±3 | 1.23 ±0.02 | 214 | 375 |
| SA 048 3X7 | Feeding Tubes / Nutrition | A 85 ±3 | 1.27 ±0.02 | 247 | 355 |
| SA 045 G36 | Suction / Tubes | A 91 ±3 | 1.25 ±0.02 | 230 | 377 |
| FOR INJECTION MOULDING | | Hardness | Specific Gravity | Tensile Strength | Elongation |
| | | ISO 868 | ISO 1183 | ISO 527 | ISO 527 |
| Product Code | Applications / Enduse | Shore A&D | g/cm ³ | kg/cm ² | % |
| TB 083 36X | Oxygen Mask | A 68 ±3 | 1.18 ±0.02 | 134 | 390 |
| TB 080 P36 | Guedel Airway | A 74 ±3 | 1.19 ±0.02 | 159 | 396 |
| TB 070 3X6 | Larynx Airway | A 75 ±3 | 1.21 ±0.02 | 164 | 419 |
| TB 060 36X | Guedel Airway | A 81 ±3 | 1.22 ±0.02 | 186 | 376 |
| TA 040 3X6 | Blood Lines Components | A 90 ±3 | 1.25 ±0.02 | 216 | 328 |
| TA 035 G6X | Blood Lines Components | A 93 ±3 | 1.28 ±0.02 | 247 | 269 |
| TA 004 AGA | Blood Lines Components | D 81 ±3 | 1.33 ±0.02 | 504 | 95 |
| TA 010 GX6 | Blood Lines Components | D 82 ±3 | 1.34 ±0.02 | 583 | 163 |



NAN YA PVC Compounds

GENERAL COMPOUNDS FOR MEDICAL DEVICES

Our general specifications to meet the requirements of European Pharmacopoeia : ISO 10993 and USP class VI which are suitable for both process of extrusion and injection.

(Representative products)

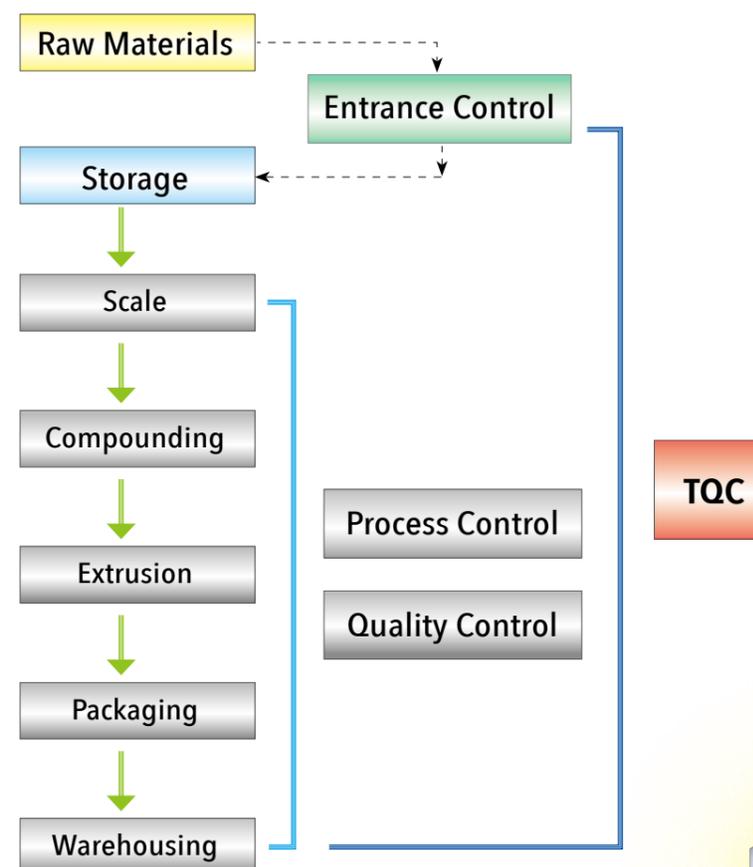
| FOR EXTRUSION | | Hardness | Specific Gravity | Tensile Strength | Elongation |
|------------------------|----------------------------|-----------|-------------------|--------------------|------------|
| | | ISO 868 | ISO 1183 | ISO 527 | ISO 527 |
| Product Code | Applications / Enduse | Shore A&D | g/cm ³ | kg/cm ² | % |
| SA 085 3X5 | Insufflation Tubes | A 63 ±3 | 1.15 ±0.02 | 136 | 449 |
| SK 095 P32 | Mask Cushion | A 65 ±3 | 1.16 ±0.02 | 115 | 434 |
| SA 080 P32 | Infusion Tubes | A 67 ±3 | 1.18 ±0.02 | 125 | 442 |
| SS 080 P35 | Spinal Needle Tubes | A 69 ±3 | 1.19 ±0.02 | 170 | 393 |
| SA 072 P32 | Suction / Tubes | A 72 ±3 | 1.19 ±0.02 | 159 | 396 |
| SA 055 GXX | Infusion Tubes | A 79 ±3 | 1.22 ±0.02 | 167 | 340 |
| SC 050 3X5 | Soft containers / Infusion | A 83 ±3 | 1.24 ±0.02 | 214 | 375 |
| SA 016 A2X | Suction Tubes | D 70 ±3 | 1.30 ±0.02 | 404 | 221 |
| FOR INJECTION MOULDING | | Hardness | Specific Gravity | Tensile Strength | Elongation |
| | | ISO 868 | ISO 1183 | ISO 527 | ISO 527 |
| Product Code | Applications / Enduse | Shore A&D | g/cm ³ | kg/cm ² | % |
| TA 115 P32 | Resuscitator | A 54 ±3 | 1.14 ±0.02 | 104 | 483 |
| TB 093 P32 | Resuscitator | A 60 ±3 | 1.16 ±0.02 | 141 | 438 |
| TB 070 3XX | Oxygen Mask | A 70 ±3 | 1.19 ±0.02 | 142 | 390 |
| TB 065 3XX | Oxygen Mask | A 71 ±3 | 1.20 ±0.02 | 143 | 378 |
| TA 040 3XX | Blood Lines Components | A 91 ±3 | 1.26 ±0.02 | 225 | 330 |
| TA 035 GXX | Oxygen Mask | A 93 ±3 | 1.27 ±0.02 | 254 | 277 |
| TA 028 GXX | Oxygen Mask | D 67 ±3 | 1.28 ±0.02 | 262 | 258 |
| TA 019 AX2 | Oxygen Mask | D 77 ±3 | 1.30 ±0.02 | 421 | 205 |

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REMARKS:

- In addition to above specification, we can provide compounds with a range of hardness shore A 50-96 and shore D 53 - 84 for the medical devices.
- Join development of unique items are available and customer made grade are welcome.

QUALITY SYSTEM FLOW CHART



NAN YA R&D Center of Taipei





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