※The photo is image

# Ramflon HS-205

**Special flexible fluorine tube**

<Applications > Physical and chemical equipment, analytical equipment, chemical industry, general machinery industry, electronic equipment industry, and others

A transparent flexible fluorine tube with excellent bending properties and chemical resistance.

- **Excellent chemical resistance and heat resistance.**
  Made entirely of fluoroelastomer, it has excellent chemical resistance and heat resistance on both the fluid and outer layers.

- **Bending property is top class in the series**
  It has excellent buckling (kink) characteristics during bending and contributes to improved workability.

- **Extremely transparent.**
  The fluid can be easily confirmed. Excellent optical characteristics

- **Little pollution due to elution.**
  Since there is no stabilizer, cross-linking agent, or plasticizer, there is almost no risk of elution.

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# Ramflon

HS-205

## Special flexible fluorine tube　Ramflon・HS-205

■ General properties of AMTERA

| Items | Unit | Measurement |
|---|---|---|
| Density | g/cm3 | 1.98 |
| Melting point | ℃ | 130 |
| Tensile strength | Mpa | 23 |
| Elongation | % | 535 |
| Water contact | θ | 98.3 |

■ Water permeation test (factory test)

| Size（　　）<br>(I.D x O.D) | After 150h<br>Survival rate | After 336h |
|---|---|---|
| 3.0 x 5.0 | 98.8% | 97.9% |

According to our measurement method

■ Limit bending radius and pressure resistance

| Size（　　）<br>(I.D x O.D) | Limit bending radius（R） | Withstand voltage value (Mpa) |
|---|---|---|
| 3.0 x 5.0 | 15mm | 1.1 |
| 4.0 x 6.0 | 20mm | 1.1 |

Bending radius limit: outside diameter retention rate of bent part%

■ Continuous bending test (factory test)

Test method　Tube (3.0 x 5.0 ) continuous bending reciprocating test with a bending tester

Results　No cracks or breaks after 90 days (10,000 times)

■Chemical resistance

| Item | Chemical Name | Evaluation |
|---|---|---|
| Acid | Hydrochloric acid（35%） | ○ |
| | Concentrated sulfuric acid（98%） | ○ |
| | Concentrated nitric acid（70%） | ○ |
| | Phosphoric acid（85%） | ○ |
| Alkali | Sodium hydroxide(（30%） | ○ |
| | Sodium hypochlorite | ○ |
| Hydrocarbon (Aliphatic) | Hexane | ○ |
| | Cyclohexane | ○ |
| Aromatic | Toluene | ○ |
| | Xylene | ○ |
| Alcohol | Methanol | ○ |
| | Ethanol | ○ |
| | Isopropyl alcohol | ○ |
| Ether | Diethyl ether | ○ |
| | Tetrahydrofuran | × |
| Ketone | Acetone | × |
| | Methyl ethyl ketone | × |
| Carboxylic acid | Acetic acid（99%） | ● |
| Ester | Ethyl acetate | × |
| | Proprietary glycol monomethyl ethereate | ● |
| | γ-butyrolactone | ○ |
| Chlorine solvent | Methylene chloride | ○ |
| | 1,2-dichloroethane | ○ |
| | Trichlorethylene | ○ |
| | Tetrachlorethylene | ○ |
| Amide | Dimethylformamide | × |
| | Methyl pyrrolidone | × |
| Others | Dimethyl sulfoxide | (*1) |
| | ASTM#2　o i l | ○ |
| | Gasoline | ○ |

◆Test method: After immersion in each chemical for 7 days at room temperature, change in weight was measured.
○ : 5% less
●: 5% or more and less than 10%
△: 10% or more and less than 20%
×: More than 20% or not recommended.
(*1) The weight increase rate is excellent, but it becomes cloudy.

■ Size（mm　　）

I.D 3.0 x 4.0 O.D
I.D 4.0 x 6.0 O.D
I.D 7.0 x 10.0 O.D

(Note) The products described in this material are not manufactured for use as medical devices that come into contact with living tissue.
The data in this pamphlet are typical values, not guaranteed values. When selecting a tube, be sure to perform a confirmation test on the customer side.
Specifications are subject to change without notice.

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