

The following is a list of the Dash Numbers (sizes) of the O-rings used on Centron® line pipe, tubing and casing. Centron furnished Nitrile (BUNA-N) Compound is specifically formulated to resist ozone attack that sometimes occurs during prolonged storage. Substitution of common Nitrile of similar hardness for immediate use is acceptable. Emergency replacement O-rings may be purchased at a local O-ring distributor. Substitution of a different size is not recommended.

Centron International Inc. and many distributors carry a complete stock of all varieties of O-rings for Centron tubulars. They can be shipped air mail or express service everyday. Feel free to call Centron International Inc. for assistance.

LINE PIPE >

Pipe Size	O-Ring Dash No.
2 CEN	141
3 CEN	152
4 CEN	244

**HIGH PRESSURE >
LINE PIPE (SP)
AND TUBING**

Pipe Size	O-Ring Dash No.
1½ SP - 1½ DH	223
2 SP - 2¾ DH	226
2½ SP - 2⅞ DH	231
3 SP - 3½ DH	236
4 SP - 4½ DH	244
5 SP	249
6 SP	260

**HIGH PRESSURE >
LINE PIPE
(SPH)**

Pipe Size	O-Ring Dash No.
4 SPH	346
6 SPH	438
7¾ SPH	444
8 SPH	446
10 SPH	448

CASING >

Pipe Size	O-Ring Dash No.
4½ DHC	244
5 DHC	244
5½ DHC	249
6⅝ DHC	438
7 DHC	260
8⅝ DHC	444
9⅝ DHC	446
10¾ DHC	448

Standard nitrile compound is compatible with a wide range of fluid media encountered in the oilfield. Special environments may require a different compound. The following table compares operating environments and O-ring compounds. The compounds are specially formulated for oilfield use. Substitutions of compounds of similar generic descriptions should not be made without consulting Centron International. For low temperature (<10 °F) installation and service, contact Centron International Inc.

CENTRON O-RING MEDIA COMPATIBILITY GUIDE

MEDIA	NITRILE BUNA-N	ETHYLENE PROPYLENE	VITON FLUOROCARBON	AFLAS
Amines	Poor	Excellent	Poor	Excellent
CO ₂	Good ¹	Good ¹	Good ¹	Excellent ¹
Crude Oil	Excellent	Poor	Excellent	Good
H ₂ S (15%)	Poor ²	Excellent	Good	Good
Kerosene	Excellent	Poor	Excellent	Good
Methane	Excellent	Excellent	Excellent	Excellent
Steam	Poor	Excellent	Good	Excellent
Salt Water	Excellent	Excellent	Good	Excellent

Note 1. Rated good for CO2 at pressures below 500 psi. AFLAS compounds should be used for pressures above 500 psi.

Note 2. Nitrile is excellent to 3% H2S.

Use this chart as a general guide only. Mixtures of some of the chemicals listed may adversely affect the chemical resistance of Centron® products and affect the accuracy of this chart. Contact Centron International Inc. for assistance.

CHEMICAL	CONCENTRATION (%)	MAXIMUM SERVICE CONDITIONS	
		HP ANHYDRIDE	AMINE
		TEMP / PRESSURE °F(°C) / psi(Kpa)	TEMP / PRESSURE °F(°C) / psi(Kpa)
Acetic Acid	<10	100 (42)/Rated	150 (66)/Rated
	11-25	75 (23)/ Rated	NR
	>25	NR	NR
Acetone	All	NR	NR
Air	Dry or Wet	180 (82)/Rated	180 (82)/Rated
Ammonium Hydroxide	<30	NR	150 (66)/Rated
Benzene	All	75 (23)/Rated	125 (82)/Rated
Boric Acid	<20	75 (23)/Rated	180 (82)/Rated
Calcium:			
Carbonate	All	125 (52)/Rated	150 (66)/Rated
Chloride	All	150 (66)/Rated	180 (82)/Rated
Nitrate	<25	150 (66)/Rated	180 (82)/Rated
Sulfate	All	150 (66)/Rated	180 (82)/Rated
Carbon Dioxide	All (Dry)	125 (52)/Rated	150 (66)/Rated
Carbon Dioxide	All (Wet)	125 (52)/Rated	150 (66)/Rated
Citric Acid	<10%	NR	150 (66)/Rated
Crude Oil	Sweet or Sour	180 (82)/Rated	210 (99)/Rated
Diesel Fuels	All	150 (66)/Rated	200 (93)/Rated
Ethanol	All	NR	150 (66)/Rated
Fuel Oil	All	150 (66)/Rated	200 (93)/Rated
Gasohols:			
Ethyl	All	NR	150 (66)/Rated
Methyl	All	NR	125 (52)/Rated
Gasoline	All types	150 (66)/Rated	180 (82)/Rated
Hexane	All	100 (38)/Rated	150 (66)/Rated
Hydrogen Peroxide	<10%	75 (23)/Rated	125 (52)/Rated

CHEMICAL	CONCENTRATION (%)	MAXIMUM SERVICE CONDITIONS	
		HP ANHYDRIDE	AMINE
		TEMP / PRESSURE °F(°C) / psi(Kpa)	TEMP / PRESSURE °F(°C) / psi(Kpa)
H ₂ S	All (Dry)	180 (82)/<800 (5.5)	180 (82)/Rated
H ₂ S	<5% (Wet)	100 (38)/<800 (5.5)	180 (82)/Rated
H ₂ S	>5% (Wet)	75 (23)/<500 (3.4)	180 (82)/Rated
HCL (Continuous)	<3%	125 (52)/Rated	100 (38)/Rated
HCL (Acidizing)	to 37%	125 (52)/Rated	180 (82)/Rated
Isopropyl Alcohol	<10%	125 (52)/Rated	150 (66)/Rated
Jet Fuel	All Types	125 (52)/Rated	180 (82)/Rated
Kerosene	All	150 (66)/Rated	180 (82)/Rated
Methanol	All	NR	125 (52)/Rated
Methylene Chloride	All	NR	NR
Natural Gas	All	125 (52)/<500 (3.4)	150 (66)/Rated
Nitric Acid	<10%	NR	NR
Potassium Chloride		150 (66)/Rated	200 (93)/Rated
Sodium Chloride	All	150 (66)/Rated	200 (93)/Rated
Sulfuric Acid	<3%	100 (38)/Rated	100 (38)/Rated
Toluene	100	100 (38)/Rated	150 (66)/Rated
Urea	<25%	125 (52)/Rated	150 (66)/Rated
Water:			
	Deionized	100 (38)/Rated	180 (82)/Rated
	Distilled	100 (38)/Rated	180 (82)/Rated
	Salt (Brine)	180 (83) Rated	200 (93)/Rated
Xylene	All	125 (52)/Rated	180 (82)/Rated

NR = Not recommended
 Rated = Catalog pressure rating of pipe