

**NOVAFLEX**  
UNI-CHEM



Uni-Chem Composite Hoses

# UNI-CHEM COMPOSITE HOSES

Uni-chem's composite hose design provides for the most flexible media transfer solution. Combined with a lightweight construction and uniformly crimped ends for maximum operator ease of handling.

## Standard Chemical Service

Uni-chem PG, PS, SG and SS composite hoses are specifically designed for in-plant liquid transfer operations as well as tank truck delivery and rail car loading. Constructed with multiple plies of polypropylene films and polyester vapor barrier these hoses can be operated at working pressure or full suction.

### Uni-chem PG, PS

P-Polypropylene Coated Steel Inner Helix  
G-High Tensile Galvanized Carbon Steel Outer Helix or  
S-316 Stainless Steel - Outer Helix

### Uni-chem SG, SS

S-316 Stainless Steel - Inner Helix  
G-High Tensile Galvanized Carbon Steel Outer Helix or  
S-316 Stainless Steel - Outer Helix

INS* ID	1	1.5	2	3	4	6	8
OUT* ID	1.5	1.9	2.4	3.4	4.4	7.0	9.4
Max WP PSI	250	250	250	250	250	250	250
Burst Pres PSI	1000	1000	1000	1000	1000	1000	1000
Bend Rad. Inches	4.0	5.0	6.0	7.9	11.9	22.0	30.0
Weight LB/FT	0.58	0.79	1.18	1.88	2.68	7.20	11.0
Max Lengths	60	60	60	60	60	60	60

Operating Temperature -40°F to +140°F



## Special Chemical Service

Uni-flon special chemical service hoses are built to meet the demands of today's highly aggressive media. Superior chemical resistance is achieved with a Teflon PTFE, inner liner, reinforced with multiple plies of polyester and polypropylene films.

### Uni-flon SG

S-316 Stainless Steel - Inner Helix  
G-High Tensile Galvanized Carbon Steel Outer Helix

### Uni-flon SS

S-316 Stainless Steel - Inner Helix  
S-316 Stainless Steel - Outer Helix

INS* ID	1	1.5	2	3	4	6	8
OUT* ID	1.5	2.0	2.5	3.5	4.5	7.0	9.4
Max WP PSI	200	200	200	200	200	200	200
Burst Pres PSI	800	800	800	800	800	800	800
Bend Rad. Inches	4.1	5.9	7.8	11.1	14.2	22.0	30.0
Weight LB/FT	0.6	0.8	1.6	2.4	3.2	7.2	11.0
Max Lengths	60	60	60	60	60	60	60

Operating Temperature -40°F to +180°F



## Standard Petroleum Service

Uni-oil GG standard petroleum service hoses are designed for the transfer of a wide range of petroleum products. Uni-oil GG hoses are ideal for transfer of media from storage tanks and process piping to rail cars or tank trucks. Multiple plies of polypropylene films and fabrics are encased in a polyester vapor barrier for superior operation.

### Uni-oil GG

G-High Tensile Galvanized Carbon Steel Inner Helix  
G-High Tensile Galvanized Carbon Steel Outer Helix

INS* ID	1	1.5	2	3	4	6	8
OUT* ID	1.5	2.0	2.5	3.5	4.5	7.0	9.4
Max WP PSI	200	200	200	200	250	250	250
Burst Pres PSI	800	800	800	800	800	1000	1000
Bend Rad. Inches	4.1	5.1	6.1	8.2	14.0	22.0	30.0
Weight LB/FT	0.6	0.8	1.6	2.4	3.2	7.2	11.0
Max Lengths	60	60	60	60	60	60	60

Operating Temperature -40°F to +140°F



## Special Petroleum Service

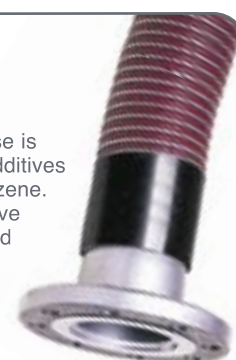
Uni-zene special service petroleum hose is designed to handle modern gasoline additives such as MTBE, ethanol and 100% benzene. Uni-zene hoses are built with an effective combination of polyamide, polyester and polypropylene film and fabrics to meet the demands of today's additives. Also recommended for all JP aviation fuels.

### Uni-zene

G-High Tensile Galvanized Carbon Steel Inner Helix.  
G-High Tensile Galvanized Carbon Steel Outer Helix.

INS* ID	1	1.5	2	3	4	6	8
OUT* ID	1.5	2.0	2.5	3.5	4.5	7.0	9.4
Max WP PSI	200	200	200	200	250	250	250
Burst Pres PSI	800	800	800	800	800	1000	1000
Bend Rad. Inches	4.1	5.1	6.1	8.2	14.0	22.0	30.0
Weight LB/FT	0.6	0.8	1.6	2.4	3.2	7.2	11.0
Max Lengths	60	60	60	60	60	60	60

Operating Temperature -40°F to +180°F





# SUPERIOR PERFORMANCE

Uni-Chem composite hoses are made only with carefully selected materials throughout with a complete range of films, fabrics and covers to meet all standard and custom hose requirements.

## Bottom Loading Service Uni-oil Or Uni-zene

Uni-BL is ideal for transferring petroleum and 100% aromatic products in production, refinery and distribution facilities. Suitable for all hose loading arms in bottom loading operations. Constructed with multiple plies of aromatic resistant films and fabrics.

All hoses can be color coded to API color codes.

### Uni-BL GG

G-High Tensile Galvanized Carbon Steel Inner Wire  
 G-High Tensile Galvanized Carbon Steel Outer Helix

**ALL TTMA FLANGED ENDS ARE CRIMPED,  
 NOT SWAGED**

<b>INS* ID</b>	<b>3</b>	<b>4</b>
<b>OUT* ID</b>	<b>3.4</b>	<b>4.4</b>
<b>Max WP PSI</b>	<b>200</b>	<b>200</b>
<b>Burst Pres PSI</b>	<b>800</b>	<b>800</b>
<b>Bend Rad. Inches</b>	<b>7.9</b>	<b>11.8</b>
<b>Weight LB/FT</b>	<b>1.88</b>	<b>2.68</b>
<b>Max Lengths</b>	<b>60</b>	<b>60</b>

Operating Temperature -40°F to +140°F

## Vapor Recovery Service

Uni-VR hose is ideal for use in petroleum and petrochemical vapor recovery systems in ship-to-shore, bottom loading and tank truck applications. This hose is lightweight and flexible. Manufactured to meet specification CFR33-154. Available with a yellow or orange cover.

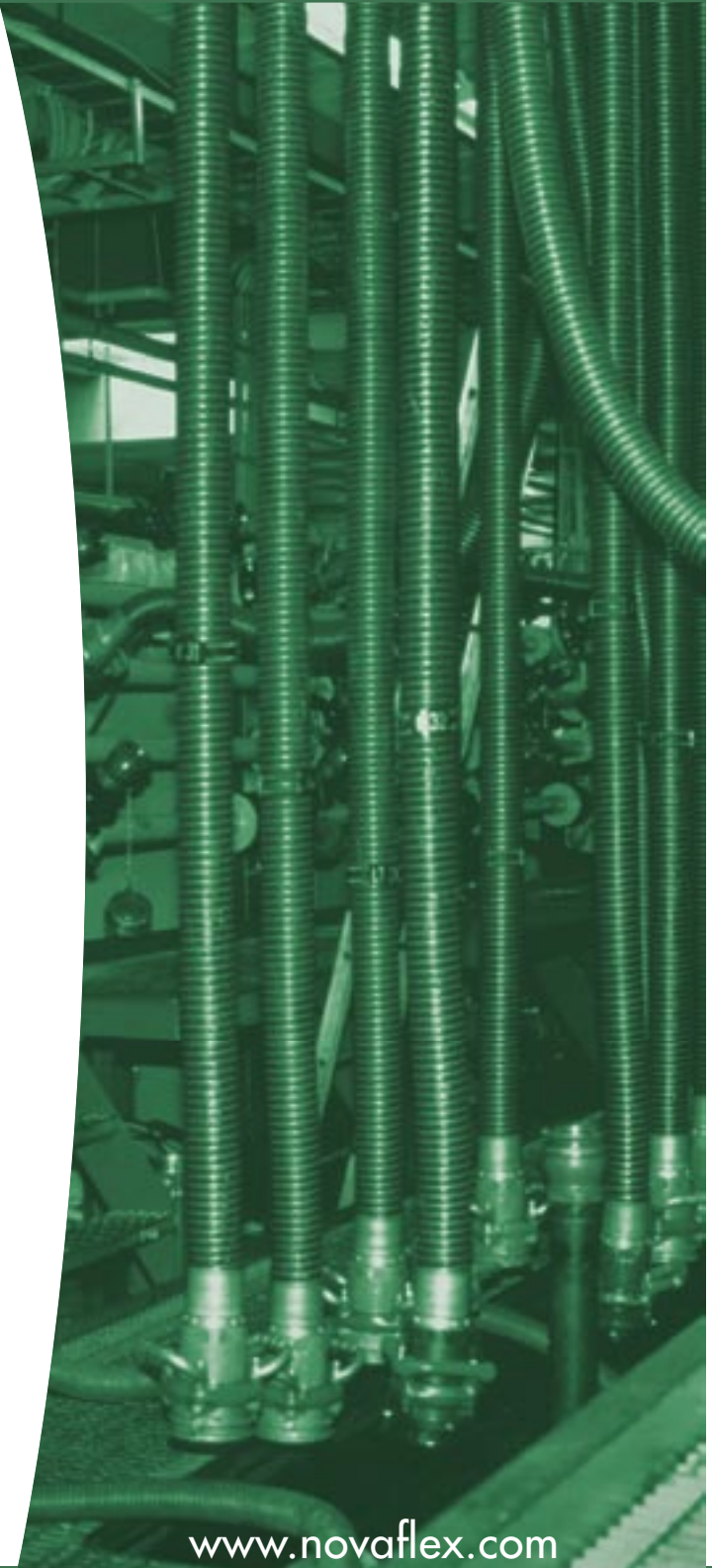
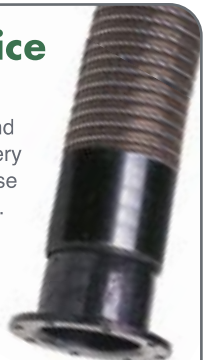
### Uni-VR\*

G-High Tensile Galvanized Carbon Steel Inner Helix  
 G-High Tensile Galvanized Carbon Steel Outer Helix

\* available with a polypropylene coated and stainless steel inner helix.

<b>INS* ID</b>	<b>1</b>	<b>1.5</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>8</b>
<b>OUT* ID</b>	<b>1.5</b>	<b>1.9</b>	<b>2.4</b>	<b>3.4</b>	<b>4.4</b>	<b>7.0</b>	<b>9.4</b>
<b>Max WP PSI</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>
<b>Burst Pres PSI</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>
<b>Bend Rad. Inches</b>	<b>3.9</b>	<b>4.8</b>	<b>6.8</b>	<b>7.7</b>	<b>10.8</b>	<b>22.0</b>	<b>30.0</b>
<b>Weight LB/FT</b>	<b>0.54</b>	<b>0.74</b>	<b>1.12</b>	<b>1.82</b>	<b>2.62</b>	<b>7.20</b>	<b>11.0</b>
<b>Max Lengths</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>

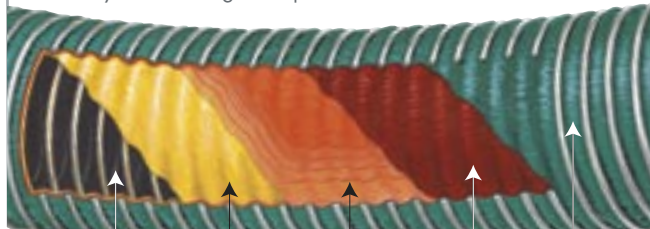
Operating Temperature -40°F to +140°F



# UNI-CHEM COMPOSITE HOSES

## Superior Performance From The Inside Out

Uni-chem composite hoses are made only with carefully selected materials throughout. Their inner films and fabrics provide optimum chemical resistance against today's highly aggressive media. Protected with the toughest PVC impregnated outer covers, Uni-chem composite hoses provide the strength and versatility needed to get the job done.



Inner Helix    Polypropylene Inner Fabric and Films    Vapor Barrier Films    Reinforcing Fabric    PVC-impregnated Nylon Cover and Outer Helix

## Dry Break Couplings

Todo Self Sealing Couplings: Provide for the safe transfer of potentially hazardous chemicals. Todo self sealing couplings employ proven valve technology that automatically stops the flow with zero product spillage.



Dry Break Couplings

## Hose Swivels

Reduce premature hose failures due to torque stress. Hose swivels allow free hose movement without imparting torque stresses to the assembly - one of the biggest causes of premature hose failure.

### Diameter:

3/4" - 4"

### Materials:

Aluminum,  
316L Stainless Steel,  
Brass with a full range  
of elastomeric seals



Hose Swivels

## Uni-Chem Disclaimer

It is impossible to test Uni-chem hose under all conditions to which it might be subjected in the field. It is therefore the buyer and/or end user's responsibility to test all Uni-chem hose under conditions that duplicate the service condition prior to installation.

## Versatile End Configurations

Only Uni-chem offers uniformly crimped hose ends (1"-8" I.D.). Combined with our custom tooled end fittings Uni-chem provides a leak free hose assembly every time.

**Male NPT Ends:** Carbon Steel, 316 Stainless Steel, Aluminum, Polypropylene

**Flanged Ends:** TTMA flanges for Bottom Loading Hoses. Fixed or floating in Carbon Steel, 304 Stainless Steel, 316 Stainless Steel, Aluminum

**Cam and Groove:** Quick disconnect couplings in 304 Stainless Steel, and Aluminum



## Safety Breakaway Couplings

An economical solution to costly accidental driveaways. The Todo SBC provides a lightweight full-flow means to prevent hard piping and loading arm damage. Available with female NPT threaded or ANSI 150 lb. flanged ends.



Safety Breakaway Couplings

**NEW**

## Marine Service Applications

All Uni-chem hose styles are constructed to marine service specifications in accordance with U.S. Coast Guard and I.M.O. regulations.

DISTRIBUTOR STAMP

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