

# TAB LOCATOR - PART II TECHNICAL INFORMATION CATALOG

Convenient "Tab Locator" page lets you quickly thumb to each category matching shaded tabs in the outer margin of each page.

<b>Product Overview</b>	811-015
<b>PVC White Schedule 40 Fittings, Unions &amp; Saddles</b>	816-896
<b>EverTUFF® TURF™ Fittings</b>	897-902
<b>PVC &amp; PP Insert Fittings</b>	903-923
<b>PVC &amp; CPVC Schedule 80 Fittings, Unions, Tank Adapters, Expansion Joints &amp; Saddles</b>	924-1015
<b>Thermoplastic Flanges</b>	1016-1034
<b>Thermoplastic Valves &amp; Actuated Valves &amp; Accessories</b>	1035-1211
<b>PVC DWV</b>	1212-1241
<b>CTS CPVC Pipe, Fittings &amp; Valves Design &amp; Installation</b>	1242-1276
<b>Low-Extractable Piping for Ultra-Pure Water</b>	1277-1292
<b>LabWaste™ CPVC Corrosive Waste Drainage Systems</b>	1293-1325
<b>Double Containment Design &amp; Installation</b>	1326-1342
<b>Plastic Pipe Engineering Guide</b>	1343-1428
<b>FlameGuard® CPVC Fire Sprinkler Piping Products</b>	1429-1457
<b>Appendices</b>	A1-H1



**Spears® Super Sourcebook - Part 2: Technical Information Catalog**  
**TABLE OF CONTENTS**

**Product Overview 811**

**PVC White Schedule 40 Fittings, Unions, Saddles 816**

Tees	820
Elbows	833
Crosses	847
Couplings	850
Adapters & Extensions	859
Bushings	865
IPT Adapter	871
Caps	872
Plugs	874
Unions	876
Saddles	878
Insert Adapters	890
Wyes	891

**EverTUFF® TURF™ Turf & Irrigation 897**

Tees	900
Elbows	900
Coupling	901
Adapters	902
Bushing	902

**PVC & PP Insert Fittings 903**

PVC Twist Lock Coupling	907
PVC Spiral Barb Tees	907
PP Spiral Barb 90° Elbow	907
PVC Spiral Barb Couplings	908
PP Spiral Barb Adapter	908
PVC Tees	909
PVC Elbows	913
PVC Tees	916
PVC Cross	916
PVC Coupling	917
PVC Adapters	918
PVC Plug	921
Insert Adapter 90° Elbow (PVC White)	922
Reducing Spigot Adapter (PVC White)	922
Spigot Adapter (PVC White)	923
Socket Adapter (PVC White)	923

**PVC & CPVC Schedule 80 Fittings, Unions, Tank Adapters, Expansion Joints & Saddles 924**

Tees	929
------	-----



Elbows	940
Crosses	953
Couplings	956
Adapters	964
Bushings	971
Caps	978
Plugs	980
Saddles	982
Wyes	990
Unions	995
Tank Adapters	1005
Expansion Joints	1013

**Thermoplastic Flanges 1016**

<b>PVC &amp; CPVC Injection Molded Class 150 Flanges</b>	<b>1020</b>
Flanges One Piece	1021
Blind Flange	1023
Flanges Van Stone Style	1023
<b>PVC &amp; CPVC Fabricated IPS, PIP &amp; Class 300 Flanges</b>	<b>1028</b>
Flanges Van Stone Style PIP	1030
Blind Flange	1030
Flanges Van Stone Style IPS	1031
Flanges Van Stone Style Class 300	1032
Flanges Van Stone Style IPS	1033

**Thermoplastic Valves & Actuated Valves & Accessories 1035**

<b>Thermoplastic Valves &amp; Accessories</b>	<b>1035</b>
Introduction to Spears® Valves	1036
Materials	1039
Standards	1043
True Union 2000 Ball Valves Overview	1044
True Union 2000 Industrial Ball Valves	1045
True Union 2000 Industrial 3-way Ball Valve	1047
True Union 2000 Industrial Tee-Style Ball Valve	1051
True Union 2000 Industrial Ball Check Valves	1055
True Union 2000 Standard Ball Valves	1057
True Union Ball Valves (Regular Style)	1059
True Union Ball Check Valves (Regular Style)	1061
Compact 2000 Ball Valves	1063
Compact Ball Valves	1065
Single Entry Ball Valves	1067
Utility Ball Valves	1069
CWV Ball Valves	1071
CTS 1/4 Turn Angle Supply Stop	1073
CTS Ball Valves	1074
Ball Valve Accessories	1075
Lab Ball Valves	1087
Needle Valves	1089
Plug Gate Valves	1091
Gate Valves	1093



## Spears® Super Sourcebook - Part 2: Technical Information Catalog

### TABLE OF CONTENTS

Globe Valves	1097
Y-Pattern Valves	1099
Wafer Butterfly Valves	1101
Butterfly Valves	1103
Diaphragm Valves	1117
Tee-Style "Zero Dead-leg" Diaphragm Valves	1122
Industrial Swing & Spring Check Valves	1124
Sump Pump Swing Check Valves	1133
Swing Check Ball Valves	1134
Quiet Check Valves	1135
Y-Check Valves	1137
Diaphragm Check Valves	1142
In-Line Adjustable Spring Check Valves	1143
Backwater Valves	1145
Y-Strainer Valves	1147
Gauge Guards	1150
Basket Strainers	1151
Suction Strainers	1153
T-Style Cartridge Filters	1155
General Installation	1157
Solvent Cement Welded Joints	1158
Threaded Connections	1160
Valve Service & Replacement Kits	1162
Ball Valve Troubleshooting Guide	1169
<b>Actuated Thermoplastic Valves</b>	<b>1172</b>
Actuated Thermoplastic Valves	1172
Spears® Actuated Valve Packages	1173
Electro Series Actuated Ball Valves	1174
Premium Actuated Valve Packages	1177
Electric Actuated True Union Ball Valves	1178
Pneumatic Actuated True Union Ball Valves	1179
Electric Actuated Butterfly Valves	1180
Pneumatic Actuated Butterfly Valves	1181
Electric Actuated Diaphragm Valves	1182
Pneumatic Actuator Options & Accessories For Ball Valves & Butterfly Valve	1190
Pneumatic Actuator Options & Accessories For Diaphragm Valves	1193
Actuation Terminology & Definitions	1196
Premium Actuated Valve Part Number Selection	1198
Custom Actuated Valve Questionnaires	1209
<b>PVC DWV</b>	<b>1212</b>
Coupling	1214
Adapter	1214
Pipe Increaser - Reducer	1214
Pipe Increaser - Eccentric Reducer	1215
Trap Adapters	1215
Cleanout Adapters	1216
Cleanout Plug	1217
Bushings	1217
Male Adaptor	1218
Plug	1218
Cap	1218



Adapter Coupling	1219
Adapter Bushing	1219
Adapters	1219
Repair Coupling	1220
Bends	1220
Ells	1224
Tees	1225
2-way Cleanout	1229
Double Fixture Fittings	1230
Wyes	1230
Return Bend	1236
Tail Piece Adapters	1236
P-Traps	1236
Closet Flanges	1237
Expansion Joints	1240
Sewer Disconnect	1240
PVC Pipe Thermal Expansion	1241

**CPVC CTS Pipe, Fittings & Valves Design & Installation 1242**

Installation Guide	1245
Tees	1260
Elbows	1264
Couplings	1267
Adapters	1268
Bushings	1272
Transition Coupling	1273
Cap	1274
CTS Ball Valves	1274
CTS Union	1275
1/4-Turn Angle Supply Stops	1275

**Low-Extractable Piping for Ultra-Pure Water Systems 1277**

Testing	1280
System Components	1282
Fittings	1282
Valves	1286
System Design & Installation	1288
Assembly Instructions	1291
Sample Specification	1292

**LabWate™ CPVC Corrosive Waste Drainage Systems 1293**

Installation Guide	1294
Transition Fitting	1303
Couplings	1303
Female Adapter	1304
Reducers	1304
Adapters	1305
Square Head Cleanout Plug	1305
Flush Bushing	1305



## Spears® Super Sourcebook - Part 2: Technical Information Catalog TABLE OF CONTENTS

Male Adapter	1306
Counter Sunk Cleanout Plug	1306
Cap	1306
No-Hub Adapter	1306
Hub Adapter	1306
Repair Coupling	1307
Ells	1307
Tees	1310
Double Fixture Fitting	1312
Wyes	1312
Return Bend	1314
Tail Piece Adapter	1314
Traps	1314
Flange - Van Stone Style	1316
Drum Trap	1316
Waste Assembly	1316
Floor Drains	1317
Floor Cleanouts	1319
LabWaste™ Pipe	1319
LW-5 Solvent Cement	1319
Round Neutralization/Dilution Tanks	1321
Chemical Resistance Information	1322
Chemical Resistance Tables	1323

### **Double Containment Design & Installation Guide 1326**

System Planning & Layout	1328
Double Containment Fitting & Component Design Overview	1329
Product Received	1330
General Installation Assembly	1331
Special Closure Fitting Installation	1334
Isolation Coupler Installation	1336
In-Line Valve Box Installation	1337
Expansion Joint Installation	1337
Sensor Saddle Installation	1339
Pressure Testing System	1339
General Solvent Cement Welding Procedures	1340
Sample Engineering Specification	1341

### **Plastic Pipe Engineering Guide 1343**

Spears® PVC and CPVC Materials	1344
Physical Properties of PVC & CPVC Pipe	1345
Dimensions & Pressure Ratings	1346
Engineering and Design	1350
Installation	1369
Special Pipe - Spears® PVC Clear	1388
Special Pipe - Spears® Low Extractable PVC	1392
Special Pipe - Spears® LabWaste™ CPVC Corrosive Waste Drainage	1396
Special Pipe - Spears® FlameGuard® CPVC Fire Sprinkler Piping Systems	1397
Special Pipe - Spears® CTS CPVC Piping Systems	1398
Spears® PVC & CPVC Duct	1402



Chemical Resistance Data for Pressure Piping	1408
Industry Standards & Test Methods	1415
Industry Piping Formulas	1417
Basic Conversions	1419
Glossary of Terms	1423

## **FlameGuard® CPVC Fire Sprinkler Piping Products 1429**

General Information	1430
Tees	1433
Elbows	1437
Crosses	1442
Couplings	1443
Adapters & Bushings	1444
Cap	1451
Test Plugs	1452
Flanges	1453
Unions	1454
Short Repair Couplings	1455
Valves	1456
Socket Dimensions	1457

## **Appendices**

- Appendix A - Basic Abbreviations Used in this Catalog
- Appendix B - Applicable Industry Standards & Test Methods
- Appendix C - Product Approvals & Certificates
- Appendix D - Recommendations for Installers & Users
- Appendix E - Special Information on Fabricated Fittings
- Appendix F - Sustainable Solutions for Total Piping System Needs
- Appendix G - Discount Codes
- Appendix H - Terms & Conditions