

Media 介质

化学兼容性表

警告! 此表不得与其它版本的化学兼容性表同时使用。
不正确的化学兼容性表可能会导致人身伤亡和财产损失。

通过介质及软管类型进行软管选型

软管化学兼容性表是我们对派克软管产品与不同介质之间适用性的建议。该适用性仅针对**软管内胶层材料**。

软管的外胶层通常用来保护增强层免受机械损伤，如磨损、气候等，因此外胶层材料与内胶层材料的化学兼容性并不一致。若是对软管外胶层是否可暴露在某种特定的环境或浸泡在某种液体中有疑问，请联系您的派克技术支持人员。

这些关于化学兼容性的信息来自于现场使用的经验、橡胶材料及介质供应商的说明以及实验室的试验。必须强调的是：本表格提供的信息只能作为一个参考，最终的软管选型还取决于压力、介质温度、环境温度及其他特殊要求，甚至是派克所未知的一些变化。要特别注意相应的法律法规。

若有超出此表范围之外的化学兼容的问题发生或者发现有未列入此表的介质，我们建议您第一时间联系流体介质的供应商。

化学兼容性表使用说明：

1. 最左边两列为介质的类型
2. 根据表中的等级选择合适的软管及软管接头材料。字母和数字如A15或X的等级含义如下所示。
3. 第三至第八列首排的字母（I至VI）代表一定类型的软管
4. 每列代表的软管类型如下所示
5. 第九至第十一列表示接头的材料
6. 若有表中未列出的产品，请与派克联系

化学兼容性等级说明

- A = 良好，推荐使用
- F = 可以或有条件使用
- X = 不适用
- ~ = 未经实验

表中数字的意义

1. 用于1.7MPa及以上压力的气体场合时，软管需针刺
2. 请特别注意该产品的使用需符合相关的法律和保险规定。更多信息请联系派克技术支持部门
3. Push-Lok软管(801, 804, 821, 821FR, 836等)不推荐用于任何燃油介质
4. 使用285, 235或244软管。这些软管与制冷剂的化学兼容性应在每次使用时单独评估，更多关于这些软管的使用信息可联系派克。勿将244软管用于矿物油或羟基苯制冷剂场合。化学兼容性好不代表介质对软管的渗透性低
5. 最高温度为65°C
6. 仅当介质在某些浓度及温度状态时具有好的化学兼容性
7. 在磷酸酯介质场合使用304, 424, 774, 804或F42软管
8. 可接受软管总成冲洗
9. 推荐使用221FR软管
10. 对于干燥的空气介质，推荐使用内胶层为第IV列和第V列的软管，气体介质最高使用温度见各个软管的性能说明。
11. 最高温度为100°C
12. 最高温度为121°C
13. 派克可提供用于气体介质的软管。更多关于产品及产品使用相关的法律及法规信息请咨询派克公司
14. 软管801, 837BM及837PU的最高工作温度为70°C
15. 对于软管801, 837BM, 837PU化学兼容性的信息不足

软管类型

第I列	AX, BXX, P35, 201, 225, 341, 422, 601, 701, 711, 721, 721TC, 721ST, 731, 761, 781, 791TC, 881
第II列	SS25UL, 301LT, 301TC, 351TC, 351ST, 371LT, 381, 421WC, 431, 441, 441RH, 451, 451TC, 451ST, 461LT, 463, 471TC, 471ST, 481, 493, 681, 681DB, 772LT, 792LT, 811, 811HT
第III列	JK, 221FR, 301SN, 302, 372, 372RH, 372TC, 402, 412, 421RH, 421SN, 422, 462, 462ST, 472TC, 477, 477ST, 482TC, 482ST, 492, 492ST, 692, 692Twin, 722TC, 772TC, 772ST, 782TC, 782ST, 787TC, 792TC, 792ST, 797TC, 821, 831
第IV列	206, 213, 226, 266, 293, 426, 436, 611, 611HT, 821FR, 836, 801*, 837BM*, 837PU* 注：*请参见数字14,15
第V列	304, 424, 604, 774, 804, F42 - 特殊的EPDM内胶层软管，可用于磷酸酯介质
第VI列	830M, 838M

注意：不同的流体介质生产商提供的产品工作温度可能有很大的不同，即使这些产品属于同一种流体。用户需密切观察各种专用品牌介质的温度，务必确保其工作温度不高于生产商推荐的最高温度。若工作温度超过生产商推荐的最高使用温度，会极易导致介质变质从而进一步导致系统中橡胶或其他材料的损坏。软管选型时既要考虑流体介质生产商所规定的介质最高温度，又要考虑软管生产商所规定的最高温度，以其中温度较低的为准。

软管，接头及设备
A

硬管接头及设备
B

快换接头
C

其他产品
D

A 软管, 接头及设备

B 硬管接头及设备

C 快换接头

D 其他产品

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
3M FC-75		A	A	A	A 15	A	A	A	A	A
A										
Acetic Acid	乙酸醋酸	X	X	X	A 15	6	X	X	X	A
Acetone	丙酮	X	X	X	A 15	A	X	A	A	A
Acetylene	乙炔	X	X	X	X	X	-	-	-	-
AEROSHELL Turbine Oil 500 (MIL-L-23699)		X	X	F	X	X	-	A	A	A
Air	空气	A,1,10	A,1,10	A,1,10	A,1,10	A,1,10	A	A	A	A
Air (dry)	空气 (干)	X	F,1,10	F,1,10	A,1,10	A,1,10	A	A	A	A
Alcohol (Methanol-Ethanol)	酒精 (甲醇-乙醇)	F	F	F	A 15	F	-	F	A	A
Ammonia (Anhydrous)	无水氨	X	X	X	X	X	-	X	X	X
Ammonium Chloride	氯化铵	A	A	A	A 15	A	A	X	X	X
Ammonium Hydroxide	氢氧化铵	F	F	F	A 15	A	X	F	X	A
Ammonium Nitrate	硝酸铵	A	A	A	A 15	A	-	F	X	A
Ammonium Phosphate	磷酸铵	A	A	A	A 15	A	-	X	X	F
Ammonium Sulfate	硫酸铵	A	A	A	A 15	A	-	F	X	F
Amoco 32 Rykon		X	A	A	F 14	X	A	A	A	A
Ampol PE 46		X	X	X	X	A, 7	F	A	A	A
AMSOIL Synthetic ATF		F	A	A	A 15	X	F	A	A	A
Amyl Alcohol	戊醇	X	X	X	A 15	F	-	X	A	A
Anderol 495,497,500,750		X	X	X	A 15	X	X	A	A	A
Aniline	苯胺	X	X	X	A 15	A	X	A	X	A
Animal Fats	动物脂肪	X	F	F	A 15	F	-	6	6	A
Aquacent Light, Heavy		X	A	A	X	X	A	A	A	A
Argon	氩气	A	A	A	A	A	A	A	A	A
Aromatic 100,150	芳香剂100,150	X	F	F	-	X	F	A	A	A
Arrow 602P		A	A	A	A 14	X	A	A	A	A
Asphalt	沥青	X	F	F	F 14	X	A	F	F	A
ASTM #3 Oil	美国材料试验协会标准3	F	F	F	A 15	X	-	A	A	A
ATF-M	自动变速箱齿轮油M	F	A	A	A 14	X	A	A	A	A
Automotive Brake Fluid	汽车刹车油	X	X	X	X	-	X	X	X	X
AW 32,46,68		F	A	A	A 14	X	A	A	A	A
B										
BCF		F	F	F	F 15	-	-	A	A	A
Benz Petraulic 32,46,68,100,150,220,320,460		F	A	A	A 14	X	A	A	A	A
Benzene, Benzol	苯	X	X	X	A 15	X	F	A	A	A
Benzgrind HP 15		-	A	A	A 15	X	-	A	A	A
Benzine	汽油	X	X	X	F 15	X	-	A	A	A
Biodegradable Hydraulic Fluid 112B	可生物降解液压油112B	X	A	A	X	-	-	A	A	A
Biodiesel E20	生物柴油 E20	X	F	X	X	X	X	-	-	-
Biodiesel E100	生物柴油 E100	X	F	X	X	X	X	-	-	-
Biodiesel E60	生物柴油 E60	X	F	X	X	X	X	-	-	-
Biodiesel E80	生物柴油 E80	X	F	X	X	X	X	-	-	-
Borax	硼砂	F	F	F	A 15	A	-	F	A	A
Boric Acid	硼酸	A	A	A	X	A	X	X	6	A
Brayco 882		X	A	A	A 15	X	-	A	A	A
Brayco Micronic 745		X	X	A	F 14	X	A	A	A	A
Brayco Micronic 776RP		F	A	A	F 14	X	A	A	A	A
Brayco Micronic 889		X	F	F	-	X	-	A	A	A
Brine	盐水	F	F	F	A 15	A	-	X	F	F
Butane	丁烷		见2&13				F	A	A	A
Butyl Alcohol, Butanol	丁醇	F	F	F	A 15	F	-	F	F	A
C										
Calcium Chloride	氯化钙	A	A	A	A 15	A	-	F	F	X
Calcium Hydroxide	氢氧化钙	A	A	A	A 15	A	-	A	A	A

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
Calcium Hypochlorite	次氯酸钙	X	X	X	A 15	A	-	X	F	X
Calibrating Fluid	标准液体	A	A	A	A 14	X	A	A	A	A
Carbon Dioxide, gas	二氧化碳 (气体)	F	F	F	F 15	6	-	A	A	A
Carbon Disulfide	二硫化碳	X	X	X	A 15	X	-	A	F	A
Carbon Monoxide (hot)	一氧化碳 (热)	F	F	F	A 15	6	-	F	6	A
Carbon Tetrachloride	四氯化碳	X	X	X	A 15	X	-	6	6	6
Carbonic Acid	碳酸	F	F	F	X	F	X	X	X	F
Castor Oil	蓖麻籽油	A	A	A	A 15	A	-	A	A	A
Castrol 5000		X	F	F	A 15	X	X	A	A	A
Cellosolve Acetate	乙酸溶剂	X	X	X	X	A	-	X	X	A
Cellugard		A	A	A	-	A	-	A	A	A
Cellulube 90, 150, 220 300, 550, 1000		X	X	X	-	A	-	A	A	A
Chevron Clarity AW 32, 46, 68		A	A	A	A 14	X	A	A	A	A
Chevron FLO-COOL 180		F	F	F	-	X	-	A	A	A
Chevron FR-8, 10, 13, 20		X	X	X	X	A, 7	F	A	A	A
Chevron Hydraulic OilsAW MV15,32,46,68,100		A	A	A	A 14	X	A	A	A	A
Chevron HyJet IV (9)		X	X	X	X	A, 7	F	A	A	A
Citric Acid	柠檬酸	F	A	A	X	A	X	X	X	6
Commonwealth EDM 242, 244		A	A	A	-	X	A	A	A	A
CompAir CN300		X	X	X	A 15	X	X	A	A	A
CompAir CS100, 200, 300, 400		X	X	X	A 15	X	X	A	A	A
Coolanol 15, 20, 25, 35, 45		A	A	A	A 15	A	X	A	A	A
Copper Chloride	氯化铜	F	A	A	X	A	-	X	X	X
Copper Sulfate	硫酸铜	A	A	A	X	A	-	X	X	F
Cosmolubric HF-122, HF-130, HF-144		X	F	A	X	X	-	A	A	A
Cosmolubric HF-1530		X	F	A	X	X	-	A	A	A
Cottonseed Oil	棉花籽油	F	A	A	F 15	X	-	A	A	A
CPI CP-4000		X	X	X	A 15	X	-	A	A	A
Crude Petroleum Oil	原油	F	A	A	A 14	X	A	F	F	A
CSS 1001 Dairy Hydraulic Fluid		F	A	A	A 15	X	-	A	A	A
D										
Daphne AW32		A	A	A	A 14	X	A	A	A	A
Dasco FR 201-A		A	A	A	-	X	-	A	A	A
Dasco FR150, 200, 310		F	A	A	-	A	-	A	A	A
Dasco FR300, FR2550		X	X	X	-	X	F	A	A	A
Dasco FR355-3		X	F	A	X	X	X	A	A	A
Deicer Fluid 419R		A	A	A	-	-	A	A	A	A
Deionized Water	去离子水	A	A	A	A 15	A	-	F	F	A
Dexron II ATF		F	A	A	A 14	X	A	A	A	A
Dexron III ATF		X	F, 11	F, 11	A15,12	X	-	A	A	A
Diesel Fuel	柴油	F, 3	A, 3	A, 3	A 15, 3	X	A(2)	A	A	A
Diester Fluids	双脂润滑油	X	X	X	A 15	X	X	A	A	A
Dow Corning 2-1802 Sullair (24KT)		-	-	-	F 15	-	-	A	A	A
Dow Corning DC 200, 510, 550, 560, FC126		A	A	A	A 15	-	-	A	A	A
Dow HD50-4		F	F	F	-	-	-	-	-	A
Dow Sullube 32		-	-	-	F 15	-	-	A	A	A
Dowtherm A,E		X	X	X	A 15	X	-	A	A	A
Dowtherm G		X	X	X	X	X	-	A	A	A
Duro AW-16, 31		A	A	A	-	X	-	A	A	A
Duro FR-HD		A	A	A	-	X	-	A	A	A
E										
EcoSafe FR-68		A	A	A	-	X	X	A	A	A
Ethanol	乙醇	F	F	F	A 15	F	-	F	A	A
Ethers	乙醚	X	X	X	A 15	X	-	A	A	A

A 软管, 接头及设备

B 硬管接头及设备

C 快换接头

D 其他产品

A 软管, 接头及设备

B 硬管接头及设备

C 快换接头

D 其他产品

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
Ethyl Acetate	乙酸乙酯	X	X	X	A 15	F	-	F	A	A
Ethyl Alcohol	乙醇	F	F	F	A 15	F	-	F	A	A
Ethyl Cellulose	乙基纤维素	F	F	F	A 15	F	-	X	F	F
Ethyl Chloride	氯乙烷	X	X	X	X	A	-	F	F	F
Ethylene Dichloride	二氯乙烷	X	X	X	A 15	X	-	X	A	X
Ethylene Glycol	乙二醇	F	A	A	A	A	A	A	F	A
Exxon 3110 FR		A	A	A	A 15	X	A	A	A	A
Exxon Esstic		A	A	A	A 14	A	A	A	A	A
Exxon Nuto H 46, 68		A	A	A	A 14	X	A	A	A	A
Exxon Tellura Industrial Process Oils		A	A	A	A 14	X	A	A	A	A
Exxon Terresstic, EP		A	A	A	A 14	A	A	A	A	A
Exxon Turbo Oil 2380		X	F	F	A 15	X	X	A	A	A
Exxon Univolt 60, N61		F	A	A	A 14	X	A	A	A	A
F										
FE 232 (Halon)		X	X	X	X	F	-	A	A	A
Fenso 150		-	A	A	-	X	A	A	A	A
Formaldehyde	甲醛	X	X	X	A 15	A	-	X	F	A
Formic Acid	甲酸	X	X	X	X	A	X	X	6	X
Freons see refrigerants	氟利昂	-	-	-	-	-	-	-	-	-
Fuel Oil	燃油	F, 3	A, 3	A, 3	A 15, 3	X	A(2)	A	A	A
Fyre-Safe120C, 126, 155, 1090E, 1150, 1220, 1300E		X	X	X	X	A, 7	F	A	A	A
Fyre-Safe 200C, 225, 211		F	A	A	A	A	F	A	A	A
Fyre-Safe W/O		A	A	A	A 15	X	A	A	A	A
Fyrguard 150, 150-M, 200		A	A	A	A	A	F	A	A	A
Fyrquel 60, 90, 150, 220, 300, 550, 1000		X	X	X	X	A, 7	F	A	A	A
Fyrquel EHC, GT, LT, VPF		X	X	X	X	A, 7	F	A	A	A
Fyrtek MF, 215, 290, 295		X	X	X	X	X	F	A	A	A
G										
Gardner-Denver GD5000, GD8000		X	X	X	A 15	X	X	A	A	A
Gasoline	汽油		See 9				-	A	A	A
Glue	胶水	F	F	F	-	X	-	A	F	A
Glycerine, Glycerol	甘油	A	A	A	A 15	A	-	A	F	A
Grease	润滑脂, 黄油, 动物油脂	A	A	A	A 14	X	A	A	A	A
Gulf-FR Fluid P37, P40, P43, P45, P47		X	X	X	A 15	A	-	A	A	A
H										
H-515 (NATO)		A	A	A	-	X	-	A	A	A
Halon 1211, 1301		F	F	F	F 15	-	-	A	A	A
Helium Gas	氦气	X	X	X	X	X	-	A	A	A
Heptane	庚烷	X	F	F	A 15	X	-	A	A	A
Hexane	己烷	X	F	F	A 15	X	-	A	A	A
HF-20, HF-28			A	A	A	A	F	A	A	A
Houghto-Safe 1055, 1110, 1115, 1120, 1130 (9)		X	X	X	X	A, 7	F	A	A	A
Houghto-Safe 271 to 640		F	A	A	A	A	F	A	A	A
Houghto-Safe 419 Hydraulic Fluid		A	A	A	-	X	-	A	A	A
Houghto-Safe 419R Deicer Fluid		A	A	A	-	-	A	A	A	A
Houghto-Safe 5046, 5046W, 5047-F		A	A	A	A 15	X	-	A	A	A
HP 100C (Jack hammer oil)		F	A	A	A 14	X	A	A	A	A
HPWG 46B		F	A	A	A	-	F	A	A	A
Hul-E-Mul		A	A	A	-	X	-	A	A	A
Hychem C, EP1000, RDF		A	A	A	A 15	A	-	A	A	A
Hydra Safe E-190		A	A	A	A 15	X	-	A	A	A
Hydra-Cut 481, 496		A	A	A	-	X	-	A	A	A
Hydrafluid 760		A	A	A	-	X	-	A	A	A
Hydrochloric Acid	盐酸	X	X	X	X	X	X	X	X	X

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
Hydrofluoric Acid	氢氟酸	X	X	X	X	X	X	X	6	X
Hydrogen Gas	氢气	X	X	X	X	X	-	A	A	A
Hydrogen Peroxide	过氧化氢	X	X	X	A 15	X	-	X	X	6
Hydrogen Sulfide	硫化氢	X	X	X	X	A	-	X	X	6
Hydrolube	加氢精制润滑油	A	A	A	A 15	A	-	A	A	A
Hydrolubric 120-B, 141, 595		F	A	A	A 15	A	-	A	A	A
Hydrosafe Glycol 200		A	A	A	A	A	F	A	F	A
HyJet IV		X	X	X	X	A, 7	-	A	A	A
I										
Ideal Yellow 77		A	A	A	A 15	X	-	A	A	A
Imol S150 to S550		X	X	X	-	-	-	A	A	A
Ingersoll Rand SSR Coolant		X	X	X	A 15	X	X	A	A	A
Isocyanates	异氰酸酯	X	X	X	A 15	X	-	A	-	A
Isooctane	异辛烷	X	F	F	A 15	X	-	A	A	A
Isopar H		X	X	X	X	X	-	A	A	A
Isopropyl Alcohol	异丙醇	F	F	F	A 15	F	-	F	A	A
J										
Jayflex DIDP	邻苯二甲酸二异癸酯	X	X	X	X	A	-	A	A	A
JP3 and JP4		X	A,3	A,3	-	X	A(2)	A	A	A
JP5		X	A,3	A,3	F 15,3	X	A(2)	A	A	A
JP9		X	X	X	X	X	-	A	-	A
K										
Kaeser 150P, 175P, 325R, 687R		X	X	X	A 15	X	-	A	A	A
Kerosene	煤油	X	A	A	F 14	X	A	A	A	A
KSL-214, 219, 220, 222		X	X	X	A 15	X	-	A	A	A
L										
Lacquer	漆	X	X	X	A 15	X	-	X	A	A
Lacquer Solvents	油漆溶剂	X	X	X	A 15	X	-	X	A	A
Lactic Acids	乳酸	X	X	X	X	X	X	X	X	A
Lindol HF		X	X	X	A 15	A	-	A	A	A
Linseed Oil	亚麻籽油	A	A	A	A 15	A	-	A	A	A
LP-Gas	液化石油气		见13				-	A	A	A
M										
Magnesium Chloride	氯化镁	A	A	A	A 15	A	-	X	X	X
Magnesium Hydroxide	氢氧化镁	F	F	F	A 15	A	-	F	F	F
Magnesium Sulfate	硫酸镁	A	A	A	A 15	A	-	A	F	A
Mercaptans	硫醇	X	X	X	X	X	-	-	-	-
Methane	甲烷		见13				-	A	A	A
Methanol	甲醇	F	F	F	A 15	F	-	F	A	A
Methyl Alcohol	甲醛	F	F	F	A 15	F	-	F	A	A
Methyl Chloride	甲基氯	X	X	X	A 15	X	-	A	A	A
Methyl Ethyl Ketone (MEK)	甲基乙基甲酮	X	X	X	A 15	X	-	F	A	A
Methyl Isopropyl-Ketone	甲基异丙基甲酮	X	X	X	X	X	-	F	A	A
Metsafe FR303, FR310,FR315, FR330, FR350		X	X	X	X	X	F	A	A	A
Microzol-T46		X	A	A	-	X	-	A	A	A
MIL-B-46176A	美国军用技术规范-B-46176A	X	X	X	X	X	-	X	X	X
MIL-H-46170	美国军用技术规范-H-46170	X	F	F	A 15	X	-	A	A	A
MIL-H-5606	美国军用技术规范-H-5606	F	A	A	A 14	X	A	A	A	A
MIL-H-6083	美国军用技术规范-H-6083	F	A	A	A 15	X	-	A	A	A
MIL-H-7083	美国军用技术规范-H-7083	F	A	A	A 15	X	-	A	A	A
MIL-H-83282	美国军用技术规范-H-83282	F	A	A	A 15	X	-	A	A	A
MIL-L-2104, 2104B	美国军用技术规范-L-2104	F	A	A	A 14	X	A	A	A	A
MIL-L-23699	美国军用技术规范-L-23699	X	X	X	X	X	X	A	A	A
MIL-L-7808	美国军用技术规范-L-7808	F	A	A	-	X	-	A	A	A

软管, 接头及设备

A

硬管接头及设备

B

快换接头

C

其他产品

D

A 软管, 接头及设备

B 硬管接头及设备

C 快换接头

D 其他产品

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
Mine Guard FR	液采矿保护液FR	A	A	A	-	A	-	A	A	A
Mineral Oil	矿物油	A	A	A	F 14	X	A	A	A	A
Mineral Spirits	矿物型溶剂	8	8	8	8	X	-	A	A	A
Mobil Aero HFE		F	A	A	F 14	X	A	A	A	A
Mobil DTE 11M, 13M, 15M, 16M, 18M, 19M		F	A	A	A 14	X	A	A	A	A
Mobil DTE 22, 24, 25, 26		F	A	A	A 14	X	A	A	A	A
Mobil EAL 224H		X	A	A	X	-	-	A	A	A
Mobil EAL Artic 10, 15, 22,32, 46, 68, 100		X	X	X	X	X	X	A	A	A
Mobil Glygoyle 11, 22, 30, 80		A	A	A	-	X	-	A	A	A
Mobil HFA		F	A	A	A 15	X	-	A	A	A
Mobil Jet 2		X	F	F	A 15	X	-	A	A	A
Mobil Nyvac 20, 30, 200, FR		F	A	A	A	A	F	A	A	A
Mobil Rarus 824, 826, 827		X	X	X	A 15	X	X	A	A	A
Mobil SHC 600 Series		F	A	A	A 15	X	-	A	A	A
Mobil SHC 800 Series		F	A	A	A 15	X	-	A	A	A
Mobil SHL 624		-	A	A	A 15	X	-	A	A	A
Mobil Vactra Oil		A	A	A	F 14	X	A	A	A	A
Mobil XRL 1618B		X	X	X	X	A, 7	F	A	A	A
Mobilfluid 423		F	A	A	A 14	X	A	A	A	A
Mobilgear SHC 150, 220, 320, 460, 680		F	F	F	A 15	X	-	A	A	A
Mobilrama 525		A	A	A	F 14	X	A	A	A	A
Molub-Alloy 890		X	X	X	A 15	X	-	A	A	A
Moly Lube "HF" 902		F	F	F	F 14	X	A	A	A	A
Monolec 6120 Hydraulic Oil		A	A	A	A 14	X	A	A	A	A
Morpholine (pure additive)	吗啉 (纯添加剂)	X	X	X	X	X	-	X	X	A
N										
Naptha	工业石油醚溶剂	X	F	F	A 15	X	-	A	A	A
Napthalene	苯	X	X	X	A 15	X	-	A	A	A
Natural Gas	天然气		见 13				-	A	A	A
Nitric Acid	硝酸	X	X	X	X	X	X	X	X	F
Nitrobenzene	硝基苯	X	X	X	A 15	X	-	X	X	A
Nitrogen, gas	氮气	F, 1	F, 1	F, 1	F 15, 1	F, 1	-	A	A	A
NORPAR 12, 13, 15		8	8	8	8	X	-	A	A	A
Nuto H 46, 68		A	A	A	A 14	X	A	A	A	A
Nyvac 20, 30, 200, FR		F	A	A	A	A	F	A	A	A
Nyvac Light		X	X	X	-	A	-	A	A	A
O										
Oceanic HW		F	A	A	A	X	F	A	A	A
Oxygen, gas	氧气	X	X	X	X	X	-	X	A	A
Ozone	臭氧	F	F	F	-	A	-	A	A	A
P										
Pacer SLC 150, 300, 500, 700		X	X	X	A 15	X	-	A	A	A
Pennzbell AWX		F	A	A	F 14	X	A	A	A	A
PENTOSIN CHF 11S		F	A	A	F	A	X	A	A	A
Perchloroethylene	四氯乙烯	X	X	X	X	X	-	F	X	A
Petroleum Ether	石油醚	X	F	F	F 14	X	A	A	A	A
Petroleum Oils	石油	A	A	A	A 14	X	A	A	A	A
Phenol (Carbolic Acid)	苯酚	X	X	X	A 15	X	X	X	F	A
Phosphate Ester Blends	磷酸酯混纺纤维	X	X	X	X	X	F	A	A	A
Phosphate Esters	磷酸酯	X	X	X	X	A, 7	-	A	A	A
Phosphoric Acid	磷酸	X	X	X	X	X	X	X	X	F
Plurasafe P 1000, 1200		F	A	A	A	F	F	A	A	A
Polyalkylene Glycol	聚亚烷基二醇	A	F	F	-	X	-	A	A	A
Polyol Ester	多元醇酯	X	F	A	X	X	-	A	A	A

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
Potassium Chloride	氯化钾	A	A	A	A 15	A	-	X	F	F
Potassium Hydroxide	氢氧化钾	X	X	X	A 15	A	-	6	X	A
Potassium Sulfate	硫酸钾	A	A	A	A 15	A	-	A	A	A
Propane	丙烷		见13				-	A	A	A
Propylene Glycol	丙二醇	F	A	A	A 15	A	-	F	F	F
Pydraul 10-E, 29-E, 50-E, 65-E, 90-E, 115-E		X	X	X	X	A, 7	F	A	A	A
Pydraul 230-C, 312-C, 68-S		X	X	X	X	A, 7	F	A	A	A
Pydraul 60, 150, 625, F9		X	X	X	X	A, 7	-	A	A	A
Pydraul 90, 135, 230, 312, 540, MC		X	X	X	X	X	-	A	A	A
Pydraul A-200		X	X	X	A 15	X	-	A	A	A
Pyro Gard 43, 230, 630		X	X	X	X	X	-	A	A	A
Pyro Gard C, D, R, 40S, 40W		F	A	A	F 15	X	A	A	A	A
Pyro Guard 53, 55, 51, 42		X	X	X	X	A, 7	-	A	A	A
Q										
Quintolubric 700		A	A	A	A 15	A	-	A	F	A
Quintolubric 807-SN		F	A	A	-	X	-	A	A	A
Quintolubric 822, 833		X	F, 5	A, 5	X	X	X	A	A	A
Quintolubric 822-68EHC(71°C,160°F mximum)		X	F, 5	A, 5	-	-	-	A	A	A
Quintolubric 888		X	F, 5	A, 5	X	X	-	A	A	A
Quintolubric 957, 958		F	A	A	A	A	F	A	A	A
Quintolubric N822-300		~	~	A	-	-	-	A	A	A
Quintolubric N888		X	A	F	X	-	X	A	A	A
R										
Rando		A	A	A	A 14	X	A	A	A	A
Rayco 782		X	F	A	X	X	-	X	X	X
Refrigerant 124	制冷剂124, 冷却液124		见4				X	A	A	A
Refrigerant Freon 113, 114	制冷氟利昂113,114	X	X	X	X	X	X	A	A	A
Refrigerant Freon 12	制冷氟利昂12		见4		X		X	A	A	A
Refrigerant Freon 22	制冷氟利昂22		见4		X		X	A	A	A
Refrigerant Freon 502	制冷氟利昂502		见4		X		X	A	A	A
Refrigerant HFC134A	制冷剂HFC134A		见4		X		X	A	A	A
Reolube Turbofluid 46		X	X	X	X	A, 7	-	A	A	A
Rotella		A	A	A	A 14	X	A	A	A	A
Royal Bio Guard 3032, 3046, 3068, 3100		X	~	A	X	X	X	A	A	A
Royco 2200, 2210, 2222, 2232, 2246, 2268		X	X	X	X	X	X	A	A	A
Royco 4032, 4068, 4100, 4150		X	X	X	A 15	X	X	A	A	A
Royco 756, 783		A	A	A	A 14	X	A	A	A	A
Royco 770		X	F	F	F 15	X	-	A	A	A
RTV Silicone Adhesive Sealants		X	X	X	X	X	-	A	A	A
S										
Safco-Safe T10, T20		-	-	-	-	A	-	F	F	A
Safety-Kleen ISO 32, 46, 68 hydraulic oil		F	A	A	-	X	A	A	A	A
Safety-Kleen Solvent		8	8	8	8	X	-	A	A	A
Santoflex 13		F	F	F	-	F	-	A	A	A
Santosafe 300		X	X	X	-	X	-	A	A	A
Santosafe W/G 15 to 30		-	-	-	A 15	A	-	A	A	A
Sea Water	海水	F	F	F	A 15	A	-	X	F	A
Sewage	污水	F	F	F	A 15	F	-	X	F	A
Shell 140 Solvent		8	8	8	8	X	-	A	A	A
Shell Clavus HFC 68		X	X	X	X	X	X	A	A	A
Shell Comptella Oil		F	F	F	A 14	X	A	A	A	A
Shell Comptella Oil S 46, 68		F	F	F	A 14	X	A	A	A	A
Shell Comptella Oil SM		F	F	F	A 14	X	A	A	A	A
Shell Diala A, (R) Oil AX		F	A	A	F 14	X	A	A	A	A

A 软管, 接头及设备

B 硬管接头及设备

C 快换接头

D 其他产品

A 软管, 接头及设备

B 硬管接头及设备

C 快换接头

D 其他产品

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈钢
Shell FRM		-	-	-	-	X	-	A	A	A
Shell IRUS 902, 905		A	A	A	-	A	-	A	A	A
Shell Naturelle HF-E		F	A	A	F	A	X	A	A	A
Shell Pella-A		A	A	A	A 15	X	-	A	A	A
Shell Tellus		F	A	A	A 14	X	A	A	A	A
Shell Tellus TD 46		A	A	A	A	A	X	A	A	A
Shell Thermia Oil C		A	A	A	A 14	X	A	A	A	A
Shell Turbo R		X	F	F	A 15	X	X	A	A	A
SHF 220, 300, 450		X	X	A	X	X	X	A	A	A
Silicate Esters	硅酸酯	A	F	F	A 15	X	-	A	A	A
Silicone Oils	硅油	A	A	A	-	-	-	A	A	A
Silicone Sealants	硅树脂密封剂	X	X	X	X	X	-	A	A	A
Skydrol 500B-4, LD-4		X	X	X	X	A, 7	F	A	A	A
Soap Solutions	皂液	X	F	F	F 15	A	-	A	A	A
Soda Ash, Sodium Carbonate	碳酸钠	A	A	A	A 15	A	-	A	F	A
Sodium Bisulfate	硫酸氢钠	F	F	F	A 15	A	-	F	A	F
Sodium Chloride	氯化钠	F	F	F	A 15	A	-	X	F	A
Sodium Hydroxide	氢氧化钠	X	X	X	A 15	A	-	A	X	A
Sodium Hypochlorite	次氯化钙	F	F	F	X	F	-	X	X	X
Sodium Nitrate	硝酸钠	F	F	F	A 15	A	-	A	F	A
Sodium Peroxide	过氧化钠	X	X	X	X	A	-	X	X	A
Sodium Silicate	硅酸钠	A	A	A	A 15	A	-	A	A	A
Sodium Sulfate	硫酸钠	A	A	A	A 15	A	-	A	A	A
Soybean Oil	大豆油	F	A	A	A 15	A	-	A	A	A
SSR Coolant	SSR冷却液	X	X	X	A 15	X	X	A	A	A
Steam	蒸汽	X	X	X	X	X	-	F	A	A
Stoddard Solvent	干洗溶剂汽油	8	8	8	8	X	-	A	A	A
Sulfur Chloride	氯化硫	X	X	X	A 15	X	-	X	X	X
Sulfur Dioxide	二氧化硫	X	X	X	X	F	-	X	F	F
Sulfur Trioxide	三氧化硫	X	X	X	A 15	F	-	X	X	X
Sulfuric Acid (0% to 30% room temperture)	硫酸	F, 6	F, 6	F, 6	X	F, 6	-	6	X	6
Summa-20, Rotor, Recip		X	X	X	A 15	X	-	A	A	A
Summit DSL-32,68,100,125		X	X	X	A 15	X	-	A	A	A
Sun Minesafe, Sun Safe		X	F	F	A 15	X	-	A	A	A
Sundex 8125		X	F	F	-	A	-	A	A	A
Suniso 3GS		A	A	A	A 14	X	A	A	A	A
Sun-Vis 722		X	F	F	-	X	-	A	A	A
Super Hydraulic Oil 100, 150, 220		A	A	A	A 14	X	A	A	A	A
SUVA MP 39, 52, 66		X	X	X	X	X	X	A	A	A
SYNCON Oil		X	X	X	X	X	-	A	A	A
Syndale 2820		X	F	F	-	-	-	A	A	A
Synesstic 32,68,100		X	X	X	X	X	X	A	A	A
Syn-Flo 70,90		X	X	X	A 15	X	-	A	A	A
SYN-O-AD 8478		X	X	X	X	A, 7	F	A	A	A
T										
Tannic Acid	鞣酸	F	A	A	A 15	A	X	X	F	X
Tar	焦油	F	F	F	A 15	X	-	X	F	A
Tellus (Shell)		F	A	A	A 14	X	A	A	A	A
Texaco 760 Hydrafluid		-	-	-	-	X	-	A	A	A
Texaco 766, 763 (200 - 300)		-	-	-	-	A	-	F	F	A
Texaco A-Z Oil		A	A	A	F 14	X	A	A	A	A
Texaco Spindura Oil 22		F	F	F	F 14	X	A	A	A	A
Texaco Way Lubricant 68		A	A	A	A 14	X	A	A	A	A
Thanol-R-650-X		X	F	F	-	X	-	A	A	A

介质		I	II	III	IV	V	VI	碳钢	黄铜	不锈 钢
Thermanol 60		X	X	X	X	X	-	A	A	A
Toluene, Toluol	甲苯	X	X	X	X	X	-	A	A	A
Transmission Oil	传动油	A	A	A	A 14	X	A	A	A	A
Tribol 1440		X	F	F	X	X	F	A	A	A
Trichloroethylene	三氯乙烯	X	X	X	A 15	X	-	X	A	A
Trim-Sol		F	A	A	A 15	X	-	A	A	A
Turbinol 50, 1122, 1223		X	X	X	X	A, 7	-	A	A	A
Turpentine	松脂	X	X	X	A 15	X	-	A	A	A
U										
Ucon Hydrolubes		F	A	A	A	A	F	A	A	A
UltraChem 215,230,501,751		X	X	X	A 15	X	-	A	A	A
Univis J26		A	A	A	A 14	X	A	A	A	A
Unleaded Gasoline	无铅汽油		见 9				-	A	A	A
Unocal 66/3 Mineral Spirits		8	8	8	8	X	-	A	A	A
Urea	尿素	F	F	F	A 15	F	-	F	-	F
Urethane Formulations	聚氨酯	A	A	A	A 15	-	-	A	A	A
V										
Van Straaten 902		A	A	A	A 15	X	-	A	A	A
Varnish	清漆	X	X	X	A 15	X	-	F	F	A
Varsol		8	F	F	8	X	-	A	A	A
Versilube F44, F55			A	A	A 15	-	-	A	A	A
Vinegar	醋	X	X	X	A 15	A	-	F	X	A
Vital 29, 4300, 5230, 5310		X	X	X	X	X	-	A	A	A
Volt Esso 35		A	A	A	A 15	X	-	A	A	A
W										
Water		F	A	A	A	A	A	F	A	A
Water / Glycols	水/乙二醇	A	A	A	A	A	F	A	F	A
X										
Xylene, Xylol	二甲苯	X	X	X	X	X	-	A	A	A
Z										
Zerol 150		A	A	A	A 14	X	A	A	A	A
Zinc Chloride	氯化锌	A	A	A	X	A	-	X	X	F
Zinc Sulfate	硫酸锌	A	A	A	X	A	-	X	A	A

软管, 接头及设备
A

硬管接头及设备
B

快换接头
C

其他产品
D