



Activate Your Life

『Fluoro Chemical』



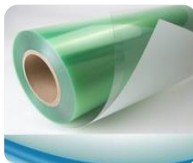
오염방지제

PFPE base silane compound



PFPE 중간체

PFPE base Carboxylic acid, Alcohol, Ester, Acrylate



고성능 불소 윤활유

PFPE base oligomer



계면활성제

C6 base EO부가물 : Leveling



『Superiority of lubricant(PFPEs oil)』



- 저마찰계수(0.11)
- 낮은 표면장력(~20dyne/cm)
- 비전단 유동화
- 저위발률
- 불연성



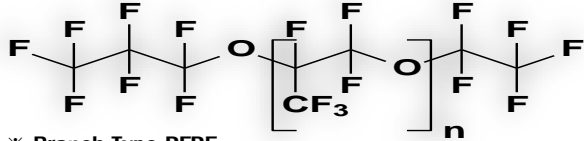
- 대부분의 용매에 비용해성
- 비반응성/화학적 비활성
- 화학적 안정성



『PFPE Oil Series』

기존제품 특징 및 소개

Perfluoropolyether 구조식



※ Branch Type PFPE

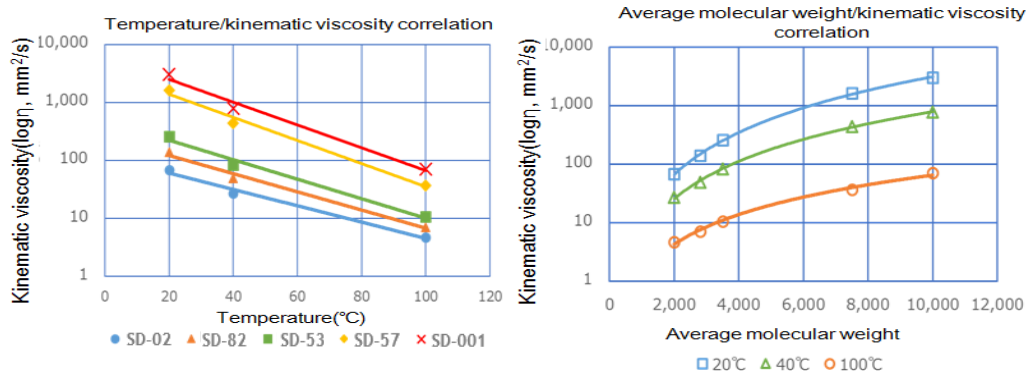
- 고온내성 및 화학적 안정성
- 낮은 마찰계수 및 표면장력
- 평균 분자량에 따른 다양한 제품군 설정

SDA-Series/ SD-Series

| | SD-71 | SD-02 | SDA-082 SD-82 | SDA-053 SD-53 | SD-54 | SD-05 | SD-06 | SD-57 | SD-001 |
|---|-------|-------|------------------|------------------|-------|-------|-------|-------|--------|
| 분자량(GPC) Molecular Weight | 1,700 | 2,000 | 2,800 | 3,500 | 4,500 | 5,400 | 6,000 | 7,500 | 10,000 |
| 열분해 온도(°C, 99.9% 분해) Thermal Decomposition Temperature | - | 331 | 384 | 401 | - | 468 | - | 530 | 566 |
| 동점도(mm2/s, cSt) Kinematic Viscosity | 20°C | 41 | 68 | 140 | 260 | 507 | 703 | 880 | 1630 |
| | 40°C | 17 | 27 | 49 | 84 | 146 | 201 | 250 | 443 |
| | 50°C | - | - | 32 | 53 | - | - | - | 246 |
| | 100°C | - | 4.7 | 7.1 | 10.6 | 16.9 | 21.6 | - | 37.2 |
| 점도지수 Viscosity index | - | 86 | 102 | 110 | 125 | 128 | - | 127 | 166 |
| 밀도(g/cc) Density | 20°C | 1.87 | 1.88 | 1.89 | 1.90 | 1.91 | 1.91 | 1.91 | 1.92 |
| 유동점(°C) Pour point | - | -60 | -54 | -36 | - | - | - | -24 | -14.5 |
| 증발량 at 22hr(%) Evaporation weight loss | 121°C | - | <5 | <3 | <1 | - | - | - | 0 |
| | 149°C | - | 18 | 4.1 | 1.3 | - | - | - | <0.1 |
| | 204°C | - | - | - | - | <5 | <2 | <2 | <0.5 |
| 표면장력(dyne/cm) Surface tension | 18 | 18 | 18 | 19 | 19 | 19 | 19 | 19 | 19 |

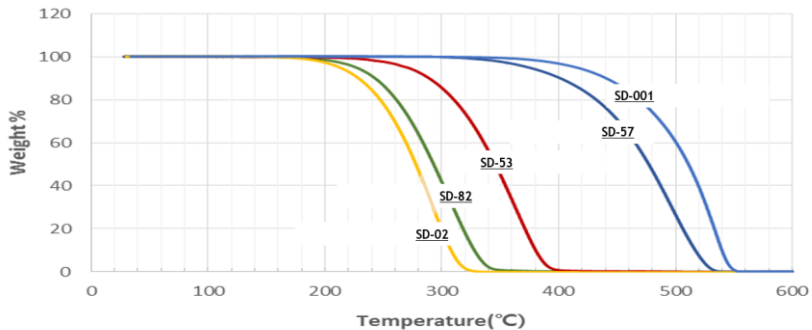
『Properties: SDA-Series/ SD-Series』

● 동점도

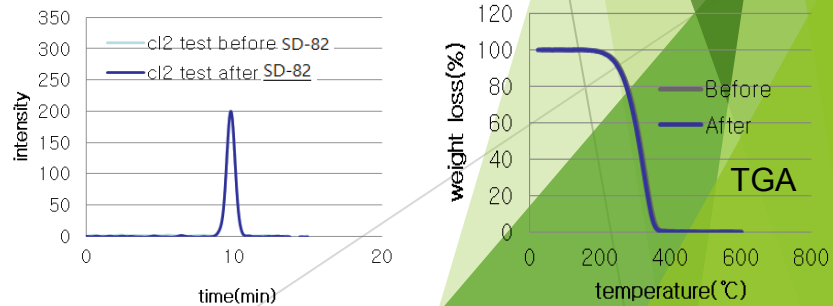


- ✓ 온도가 낮아지고 분자량이 증가함에 따라 동점도가 증가함
- ✓ 분자량 조절을 통해서 동점도 조절이 가능함

● 열 특성 (TGA)



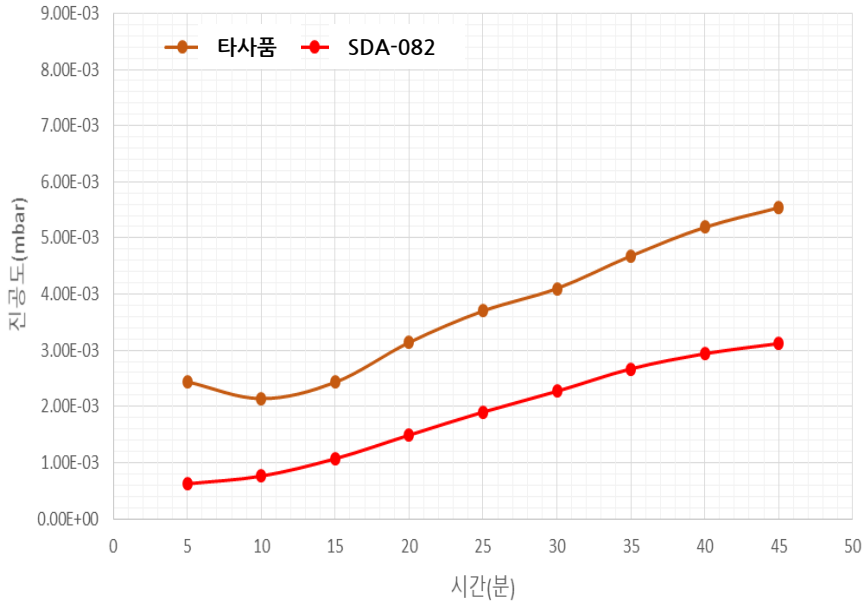
● 화학적 내성 (Cl₂ / 80 °C / 5days)



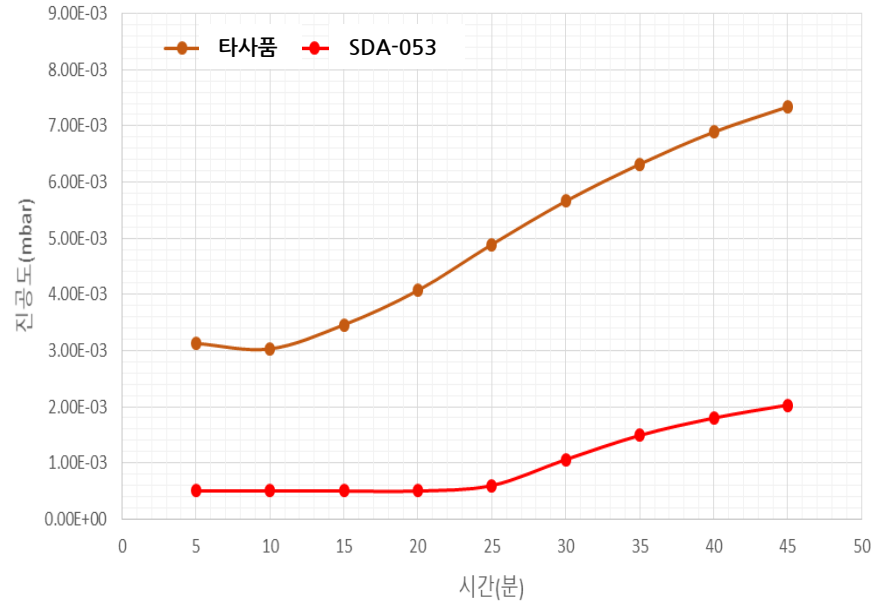
『Properties: SDA-Series』

● 진공도 타사품 비교 시험 결과

가동시간별 진공도



가동시간별 진공도



SK Hynix 전 공정 사용 승인 (2022.10)
Samsung 전 공정 사용 승인 (2023.03)

『Application』



Semiconductor Vacuum Pump

Fluoro Lubricant

SDA-082

SDA-053



Chemical Resistance Vacuum Oil Pump



Dryer

Grease Base Oil

SD-02

SD-82

SD-53

SD-54

SD-05

SD-06

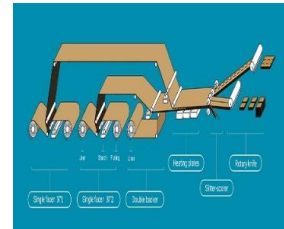
SD-57

SD-001

Styler



Conveyor Belt



Corrugator



SD Trading Corporation | 96, Minsokgongwon-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Republic of Korea 15465
Telephone: +82 31 481-4714, Fax: +82 31 481-4700
Email: sungjun.kim@sd-trading.co.kr