GS 칼텍스

물질안전보건자료

제품명	HMC PCDO C2 0W-30		
MSDS번호	목록번호	최초 작성일자	최종 개정일자
제출대상아님	LB2820	2014-10-01	2026-01-05

1. 화학제품과 회사에 관한 정보

가. 제품명

HMC PCDO C2 0W-30

나. 제품의 권고 용도와 사용상의 제한

- 제품의 권고 용도 : 21.1. 윤활유 디젤 엔진오일
- 제품의 사용상의 제한 : 정해진 용도 이외에는 사용하지 말것.

다. 공급자 정보

○ **제조자 정보**

- 회사명 : 지에스칼텍스(주)
- 주소 : 서울특별시 강남구 논현로 508
- 긴급 전화번호 : 1899-5145

2. 유해·위험성

가. 유해·위험성 분류

- 해당없음

나. 예방조치문구를 포함한 경고표지 항목

○ **그림문자**

- 해당없음

○ **신호어**

- 해당없음

○ **유해·위험문구**

- 해당없음

○ **예방조치문구**

1) 예방

- 해당없음

2) 대응

- 해당없음

3) 저장

- 해당없음

4) 폐기

- 해당없음

다. 유해·위험성 분류기준에 포함되지 않는 기타 유해·위험성

○ 제품 NFPA 등급

(※ 0-불충분, 1-약간, 2-보통, 3-높음, 4-매우높음)

제품명	보건 Health	화재 Flammable	반응성 Reaction
HMC PCDO C2 0W-30	0	1	0

3. 구성성분의 명칭 및 함유량

화학물질명	관용명 및 이명 (異名)	CAS No.	KE No.	함유량 (%)
Distillates (petroleum), hydrotreated heavy paraffinic	유제 오일	64742-54-7	KE-12546	45 ~ 55
1-Dodecene homopolymer, hydrogenated	CSR160805-24366	151006-63-2	2003-3-2379	25 ~ 35
영업비밀				5 ~ 15
Diisononyl adipate	BIS(7-METHYLOCTYL) ADIPATE	33703-08-1	KE-10933	1 ~ 6
Distillates (petroleum), solvent-dewaxed light paraffinic	Solventdewaxed light paraffinic distillate (petroleum)	64742-56-9	KE-12609	0.3 ~ 2
Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts		134759-18-5	KE-28668	0.3 ~ 2
Distillates (petroleum), solvent-dewaxed heavy paraffinic	(엄격한 용제정제 혹은 수소처리된) 미네랄 오일, 석유 증류액, 중 파라핀계열 탈랍 용매 ; 중 파라핀계 증류액으로 제거한 솔벤트;아드리아틱 스필들 오일	64742-65-0	KE-12602	0.2 ~ 2
Paraffin oils (petroleum), catalytic dewaxed heavy	MINERAL OIL, PETROLEUM DISTILLATES CATALYTIC DEWAXED HEAVY PARAFFINIC (mild or no solvent-refining o	64742-70-7	KE-27774	0.1 ~ 1
Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based	Factory Supply Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	KE-22620	0.1 ~ 1
1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3)		799241-27-3		0.1 ~ 0.3
Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched		253873-84-6		0.1 ~ 0.3

Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']([N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched		253873-83-5		0.1 ~ 0.3
Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi-		90901-24-9		0.1 ~ 0.3
2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate				0.002 ~ 0.003

※ 비공개 대상물질 정보

대체물질명(총칭명)	승인번호	함유량(%)	유효기간
2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate	T-2022-00004	0.002 ~ 0.003	2027-01-05

※ 상기 성분 내역을 제외한 모든 구성성분은 규제대상 법률 및 산업안전보건법 제104조(유해인자의 분류기준) 유해성 위험성 분류 기준에 해당하지 않아 표시되지 않았습니다.

※ 이 제품은 IP346 방법에 의해 측정된 DMSO extract가 3% 미만입니다.

4. 응급조치요령

가. 눈에 들어갔을 때
- 물질과 접촉시 즉시 20분 이상 흐르는 물에 눈을 씻어내시오.
- 눈에 자극이 지속되면 의학적인 조치·조언을 구하시오.

나. 피부에 접촉했을 때
- 물질과 접촉시 즉시 20분 이상 흐르는 물에 피부를 씻어내시오.
- 오염된 옷과 신발을 제거하고 격리하시오.
- 재사용 전에는 옷과 신발을 완전히 씻어내시오.
- 피부 자극이 생기면 의학적인 조치·조언을 구하시오.

다. 흡입했을 때
- 신선한 공기가 있는 곳으로 옮기시오.
- 호흡하지 않는 경우 인공호흡을 실시하시오.
- 호흡이 힘들 경우 산소를 공급하시오.
- 호흡기 증상이 나타나면 의료기관(의사)의 진찰을 받으시오.

라. 먹었을 때
- 의식이 없는 사람에게 입으로 아무것도 먹이지 마시오.
- 구토를 유발해야 하는지에 대해서 의사의 조언을 받으시오.
- 즉시 의학적인 조치·조언을 받으시오.
- 입을 씻어내시오.

마. 기타 의사의 주의사항
- 의료인력이 해당물질에 대해 인지하고 보호조치를 취하도록 하시오.

5. 폭발·화재시 대처방법

가. 적절한(부적절한) 소화제
- 소형 화재: 건조모래, 건조화학제, 내알콜포말, 물분무, 일반포말, CO2 (적절한 소화제)
- 대형 화재: 물분무/안개, 일반포말 (적절한 소화제)
- 고압주수 (부적절한 소화제)

나. 화학물질로부터 생기는 특
- 열, 스파크, 화염에 의해 점화할 수 있음.

정 유해성

- 화재시 자극성, 독성 가스를 발생할 수 있음.
- 물질의 흡입은 유해할 수 있음.

다. 화재진압시 착용할 보호구 및 예방조치

- 일부는 고온으로 운송될 수 있음.
- 누출물은 오염을 유발할 수 있음.
- 접촉 시 피부와 눈에 화상을 입힐 수 있음.
- 소화수의 처분을 위해 도랑을 파서 가두고 물질이 흩어지지 않게 하시오.
- 위험하지 않다면 화재지역에서 용기를 옮기시오.
- 탱크 화재시 소화가 진화된 후에도 다량의 물로 용기를 식히시오.
- 탱크 화재시 압력 방출장치에서 고음이 있거나 탱크가 변색할 경우 즉시 물러나시오.
- 탱크 화재시 화염에 휩싸인 탱크에서 물러나시오.

6. 누출사고시 대처방법

가. 인체를 보호하기 위해 필요한 조치사항 및 보호구

- 노출물을 만지거나 걸어다니지 마시오.
- 모든 점화원을 제거하시오.
- 오염지역을 환기하시오.
- 위험하지 않다면 누출을 멈추시오.
- 분진 형성을 방지하시오.
- 피해야할 물질 및 조건에 유의하시오.

나. 환경을 보호하기 위해 필요한 조치사항

- 수로, 하수구, 지하실, 밀폐공간으로의 유입을 방지하시오.

다. 정화 또는 제거 방법

- 소량 누출시 다량의 물로 오염지역을 씻어내시오.
- 다량 누출시 액체 누출물과 멀게하여 도랑을 만드시오.
- 청결한 삽으로 누출물을 깨끗하고 건조한 용기에 담고 느슨하게 닫은 뒤 용기를 누출지역으로부터 옮기시오.
- 분말 누출시 플라스틱 시트로 덮어 확산을 막고 건조한 상태로 유지하시오.
- 소량 누출시 모래, 비가연성 물질로 흡수하고 용기에 담으시오.

7. 취급 및 저장방법

가. 안전취급요령

- 취급 후 철저히 씻으시오.
- 피해야할 물질 및 조건에 유의하시오.
- 공학적 관리 및 개인보호구를 참조하여 작업하시오.
- 고온에 주의하시오.

나. 안전한 저장방법

- 서늘하고 건조한 장소에 저장하시오.
- 피해야할 물질 및 조건에 유의하시오.
- 밀폐하여 보관하시오.

8. 노출방지 및 개인보호구

가. 화학물질의 노출기준, 생물학적 노출기준 등

화학물질명	국내규정	ACGIH 규정	OSHA 규정	생물학적 노출기준
Distillates (petroleum), hydrotreated heavy paraffinic	TWA : 자료없음	TWA 5 mg/m3, Inhalable particulate matter(Mineral oil, Pure, highly and severely refined)	자료없음	자료없음
1-Dodecene homopolymer, hydrogenated	자료없음	자료없음	자료없음	자료없음
Trade secret	자료없음	자료없음	자료없음	자료없음
Diisononyl adipate	자료없음	자료없음	자료없음	자료없음
Distillates (petroleum), solvent-dewaxed light paraffinic	TWA : 자료없음	TWA 5 mg/m3, Inhalable particulate matter(Mineral oil, Pure, highly and severely refined)	자료없음	자료없음
Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts	자료없음	자료없음	자료없음	자료없음

Distillates (petroleum), solvent-dewaxed heavy paraffinic	TWA : 자료없음	TWA 5 mg/m3, Inhalable particulate matter(Mineral oil, Pure, highly and severely refined)	자료없음	자료없음
Paraffin oils (petroleum), catalytic dewaxed heavy	자료없음	TWA 5 mg/m3, Inhalable particulate matter(Mineral oil, Pure, highly and severely refined)	자료없음	자료없음
Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based	자료없음	TWA 5 mg/m3, Inhalable particulate matter(Mineral oil, Pure, highly and severely refined)	자료없음	자료없음
1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3)	자료없음	자료없음	자료없음	자료없음
Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched	TWA : 0.5 mg/m3	자료없음	PEL: 5 mg/m3 (Soluble compounds), 15 mg/m3 (Insoluble compounds - Total dust) mg/m3	자료없음
Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched	자료없음	자료없음	자료없음	자료없음
Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi-	자료없음	자료없음	자료없음	자료없음

2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate	자료없음	자료없음	자료없음	자료없음

나. 적절한 공학적 관리

- 공정격리, 국소배기를 사용하거나 공기수준을 노출기준 이하로 유지하시오.
- 조건에 맞도록 환기 속도를 조정하시오.

다. 개인보호구

○ 호흡기 보호

- 노출되는 입자상 물질의 물리화학적 특성에 맞는 산업안전보건공단의 인증을 필한 호흡용 보호구를 착용하시오.
- 입자상 물질의 경우 다음과 같은 호흡기 보호구가 권고됨 - 안면부 여과식 방진마스크 또는 공기 여과식 방진마스크(고효율 미립자 여과재) 또는 전동팬 부착방진 마스크(분진, 미스트, 흄용 여과재)
- 산소가 부족한 경우(<196%), 송기마스크, 혹은 자급식 호흡보호구를 착용하시오.
- 사전에 경고 특성을 고려하시오.

○ 눈 보호

- 눈에 자극을 일으키거나 기타 건강상의 장해를 일으킬 수 있는 물질에 대하여 눈을 보호하기 위하여 통기성 보안경을 착용하시오.
- 근로자가 접근이 용이한 위치에 긴급세척시설(샤워식) 및 세안설비를 설치하시오.
- 해당물질에 직접적인 노출 또는 노출 가능성이 있는 경우, 한국산업안전보건공단 인증을 받은 화학물질용 보안경을 착용할 것.

○ 손 보호

- 화학물질의 물리적 및 화학적 특성을 고려하여 적절한 재질의 보호잡강을 착용하시오.
- 해당물질에 직접적인 노출 또는 노출 가능성이 있는 경우, 한국산업안전보건공단 인증을 받은 화학물질용 안전 장갑을 착용할 것.

○ 신체 보호

- 화학물질의 물리적 및 화학적 특성을 고려하여 적절한 재질의 보호의복을 착용하시오.
- 해당물질에 직접적인 노출 또는 노출 가능성이 있는 경우, 한국산업안전보건공단 인증을 받은 화학물질용 보호복을 착용할 것.

9. 물리화학적 특성

항목	입력값
외관	액체
색상	노란색
냄새	석유계 화합물의 냄새
냄새역치	자료없음
pH	자료없음
녹는점/어는점	자료없음
초기 끓는점과 끓는점범위	자료없음
인화점	220 ℃
증발속도	자료없음
인화성(고체,기체)	자료없음

인화폭발범위	자료없음
증기압	자료없음
용해도	자료없음
증기밀도	자료없음
비중	0.848
분배계수	자료없음
자연발화온도	자료없음
분해온도	자료없음
점도	10.6 mm2/s (at 100℃)
분자량	자료없음

10. 안정성 및 반응성

가. 화학적 안정성 및 유해 반응의 가능성
- 상온 상압 조건에서 안정함.
- 가열시 용기가 폭발할 수 있음.
- 일부는 탈 수 있으나 쉽게 점화하지 않음.

나. 피해야 할 조건
- 열, 스파크, 화염 등 점화원.

다. 피해야 할 물질
- 가연성 물질.
- 자극성, 독성 가스.

라. 분해시 생성되는 유해물질
- 자료없음

11. 독성에 관한 정보

가. 가능성이 높은 노출 경로에 관한 정보

○ 호흡기를 통한 흡입

- 호흡기를 통한 흡입 영향 없음

○ 피부접촉

- 피부 접촉 시 영향 없음

○ 눈 접촉

- 눈 접촉 시 영향 없음

○ 입을 통한 접촉

- 입을 통한 섭취 영향 없음

나. 건강 유해성 정보

○ 급성독성

*** 경구 - 분류되지 않음 (ATEmix > 2000 mg/kg)**

- Distillates (petroleum), hydrotreated heavy paraffinic : 랫드(암/수), LD50 > 5,000 mg/kg bw, 사망개체 없음 (유사물질 자료: 64742-56-9) (OECD TG 401, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 랫드(암/수), LD50 > 5000 ㎎/kg (OECD TG 401, GLP) (유사물질 자료: Alkane 4)(ECHA)

- Trade secret : 자료없음
- Diisononyl adipate : 랫드(암/수); LD50 > 5000 mg/kg bw, 사망개체 없음 (OECD TG 401과 유사) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 랫드; LD50 > 5000 mg/kg bw, 사망없음 (OECD TG 401, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 랫드(암/수); LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 401, GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 랫드(암/수); LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 401, GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 랫드(암/수); 사망없음; LD50 > 5000 mg/kg bw; (유사물질자료: CAS No. 64742-56-9) (OECD TG 401, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

*** 경피 - 분류되지 않음 (ATEmix > 2000 mg/kg)**

- Distillates (petroleum), hydrotreated heavy paraffinic : 토끼(암/수), LD50 > 5,000 mg/kg bw, 사망개체 없음 (유사물질 자료: 64742-56-9) (OECD TG 402, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 랫드(암/수), LD50 >2000 ㎎/kg, 사망없음 (OECD TG 402, GLP) (유사물질 자료; Alkane 4)(ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 자료없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 토끼; LD50 > 5000 mg/kg bw, 사망없음 (OECD TG 402, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 토끼(암/수); LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 402, GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 토끼(암/수); LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 402, GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 토끼; 사망없음; LD50 > 2000 mg/kg bw (유사물지자료: CAS No. 64742-53-6) (OECD TG 402, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

*** 흡입(가스) - 해당없음**

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 자료없음
- Diisononyl adipate : 해당없음

- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

*** 흡입(증기) - 분류되지 않음 (ATEmix > 20 mg/L)**

- Distillates (petroleum), hydrotreated heavy paraffinic : 자료없음
- 1-Dodecene homopolymer, hydrogenated : 자료없음
- Trade secret : 자료없음
- Diisononyl adipate : 자료없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 자료없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 자료없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 자료없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

*** 흡입(분진, 미스트) - 분류되지 않음 (ATEmix > 5 mg/L)**

- Distillates (petroleum), hydrotreated heavy paraffinic : 에어로졸 흡입; 랫드(암/수); 4h-LC50 > 5.53 mg/L. 사망개체 없음 (유사물질: MRD-87-102) (OECD TG 403) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 랫드(암/수), 에어로졸 흡입, LC50 > 5.06 mg/L /4h, 사망없음 (OECD TG 403, GLP) (유사물질 자료; Poly Alpha Olefin (1-dodecene trimer, hydrogenated)) ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 랫드(암/수); 에어로졸 흡입; 4h-LC50 > 5.7 mg/L, 사망개체 없음 (유사물질: 103-23-1) (OECD TG 403, GLP) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 랫드; 에어로졸 흡입; LC50 > 5.53 mg/L air/4h, 사망없음 (OECD TG 403) (유사물질자료 : MRD-87-102) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 랫드(암/수); 에어로졸 흡입; LC50 > 5.53 mg/L air /4h, 사망없음 (OECD TG 403) (유사물질 자료: MRD-87-102) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 랫드(암/수); 에어로졸 흡입; LC50 > 5.53 mg/L air /4h, 사망없음 (OECD TG 403) (유사물질 자료: MRD-87-102) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 랫드; 흡입: 에어로졸; 사망없음; LC50

> 5.53 mg/L air 4시간 (유사물질자료: CAS No. 64741-88-4) (OECD TG 403) (ECHA)

- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 피부부식성 또는 자극성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 토끼를 대상으로 피부부식성/자극성 시험결과, 비자극성 (유사물질 자료 : 64742-56-9) (GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 토끼를 대상으로 피부부식성/자극성 시험결과, 비자극성 (OECD TG 404, GLP) (유사물질 자료; Linealene dimer A-30H)(ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 토끼를 대상으로 피부부식성/자극성 시험결과, 비자극성 (OECD TG 404) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 토끼를 대상으로 피부부식성/자극성 시험결과, 비자극성 (GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 토끼를 대상으로 피부부식성/자극성 시험결과, 비자극성 (GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 토끼를 대상으로 피부부식성/자극성 시험결과, 비자극성 (GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 토끼를 대상으로 피부 부식성/피부 자극성 시험결과 비자극성 (유사물질자료: CAS No. 64742-53-6) (OECD TG 404, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.- : 자료없음

thioxodi-, branched

- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 심한 눈손상 또는 자극성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 토끼를 대상으로 심한 눈손상성/자극성 시험결과, 비자극성 (유사물질 자료: 64742-56-9) (OECD TG 405와 유사, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 토끼를 대상으로 심한 눈손상/자극성 시험결과, 비자극성 (OECD TG 405, GLP) (유사물질 자료: Oronite XS 101)(ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 토끼를 대상으로 심한 눈손상/자극성 시험결과, 비자극성 (OECD TG 405) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 토끼를 대상으로 심한 눈손상/자극성 시험결과, 비자극성 (GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 토끼를 대상으로 심한 눈손상/자극성 시험결과, 비자극성 (OECD TG 405, GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 토끼를 대상으로 심한 눈손상/자극성 시험결과, 비자극성 (OECD TG 405, GLP) (유사물질 자료: 64742-56-9) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 토끼를 대상으로 심한 눈 손상성/눈 자극성 시험결과 비자극성 (유사물질자료: CAS No. 64742-56-9) (OECD TG 405, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N- : 자료없음

ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched

- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 호흡기과민성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 자료없음
- 1-Dodecene homopolymer, hydrogenated : 자료없음
- Trade secret : 자료없음
- Diisononyl adipate : 자료없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 자료없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 자료없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 자료없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N- : 자료없음

ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched

- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 피부과민성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 기니피그를 대상으로 피부과민성 시험결과, 비과민성 (유사물질 자료: 64742-56-9) (OECD TG 406, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 기니피그(암/수)를 대상으로 피부과민성시험결과, 비과민성 (OECD TG 406, GLP) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 기니피그를 대상으로 드레이즈 테스트결과, 비과민성 (유사물질: 103-23-1) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 기니피그를 이용한 피부과민성 시험결과, 비과민성 (OECD TG 406, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 기니피그를 대상으로 피부과민성 시험결과, 비과민성 (OECD TG 406, GLP) (유사물질 자료: 64742-53-6) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 기니피그를 대상으로 피부과민성 시험결과, 비과민성 (OECD TG 406, GLP) (유사물질 자료: 64742-53-6) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 기니피그를 대상으로 피부 과민성 시험결과 비과민성 (유사물질자료: CAS No. 64742-53-6) (OECD TG 406, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N- : 자료없음

ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched

- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 발암성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : EU CLP 1272/2008 : Carc. 1B (Note L : IP346 방법에 의해 측정된 DMSO extract가 3% 미만인 경우는 제외)
- 1-Dodecene homopolymer, hydrogenated : 고용노동부고시, 산업안전보건법, IARC, OSHA, NTP, ACGIH, EU CLP 1272/2008 : 등재되지 않음
- Trade secret : 자료없음
- Diisononyl adipate : 고용노동부고시, 산업안전보건법, IARC, NTP, ACGIH, NIOSH, OSHA, EU CLP 1272/2008 : 등재되지 않음
- Distillates (petroleum), solvent-dewaxed light paraffinic : EU CLP 1272/2008 : Carc. 1B (Note L : IP346 방법에 의해 측정된 DMSO extract가 3% 미만인 경우는 제외)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 고용노동부고시, 산업안전보건법, IARC, OSHA, NTP, ACGIH, EU CLP 1272/2008: 등재되지 않음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : EU CLP 1272/2008 : Carc. 1B (Note L : IP346 방법에 의해 측정된 DMSO extract가 3% 미만인 경우는 제외)
- Paraffin oils (petroleum), catalytic dewaxed heavy : EU CLP 1272/2008: Carc. 1B (Note L: IP346 방법에 의해 측정된 DMSO extract가 3% 미만인 경우는 제외)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : EU CLP 1272/2008: 발암성 1B (Note L : IP346 방법에 의해 측정된 DMSO extract가 3% 미만인 경우는 제외)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 고용노동부고시, 산업안전보건법, IARC, OSHA, NTP, ACGIH, EU CLP 1272/2008: 등재되지 않음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 고용노동부고시, 산업안전보건법, IARC, OSHA, NTP, ACGIH, EU CLP 1272/2008: 등재되지 않음
- Molybdenum, [N,N-bis(2- : 고용노동부고시, 산업안전보건법, IARC, OSHA,

ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : NTP, ACGIH, EU CLP 1272/2008: 등재되지 않음

- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 고용노동부고시, 산업안전보건법, IARC, OSHA, NTP, ACGIH, EU CLP 1272/2008: 등재되지 않음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 생식세포변이원성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 시험관 내 박테리아 복귀돌연변이시험결과, 음성 (OECD TG 471과 유사) (ECHA)
  시험관 내 포유류 염색체이상시험결과, 음성 (유사물질 자료 : 64742-53-6) (OECD TG 473과 유사, GLP) (ECHA)
  생체 내 소핵시험결과, 음성(유사물질 자료 : 64741-62-4, 64741-53-3) (OECD TG 474와 유사) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 시험관 내 포유류세포 유전자돌연변이시험결과, 음성 (OECD TG 476, GLP) (유사물질 자료; Alkane 4)(ECHA)
  생체 내 포유류 소핵시험결과, 음성 (OECD TG 474, GLP) (유사물질 자료: 1-Dodecene dimer with 1-decene, hydrogenated) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 시험관 내 박테리아 복귀돌연변이시험결과, 음성 (OECD TG 471과 유사) (ECHA)
  시험관 내 포유류세포를 이용한 유전자돌연변이시험결과, 음성 (OECD TG 476과 유사) (ECHA)
  시험관 내 포유류 세포를 이용한 소핵시험결과, 음성 (OECD TG 487) (ECHA)
  생체 내 포유류 적혈구를 이용한 소핵시험결과, 음성 (유사물질: 103-23-1) (OECD TG 474와 유사) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 시험관 내 포유류 배양세포를 이용한 염색체이상시험결과, 음성 (OECD TG 473, GLP) (ECHA)
  시험관 내 포유류 배양세포를 이용한 유전자돌연변이시험결과, 양성 (OECD TG 476) (ECHA)
  시험관 내 미생물을 이용한 복귀돌연변이시험결과, 양성 (OECD TG 471, GLP) (ECHA)
  생체 내 포유류 적혈구를 이용한 소핵시험결과, 음성 (OECD TG 474) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 시험관 내 박테리아 복귀돌연변이시험 (OECD TG 471)결과, 양성 (유사물질 자료: 64741-50-0) (ECHA), 시험관 내 포유류 염색체이상시험결과, 음성 (OECD TG 473) (유사물질 자료: L-06 Light Hydrotreated Feedstock) (ECHA)
  생체 내 포유류 적혈구를 이용한 소핵시험결과, 음성 (OECD TG 474) (유사물질 자료: solvent-extracted, dewaxed paraffin oil) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 시험관 내 박테리아 복귀돌연변이시험 (OECD TG 471)결과, 양성 (유사물질 자료: 64741-50-0) (ECHA), 시험관 내 포유류 염색체이상시험결과, 음성 (OECD TG 473) (유사물질 자료: L-06 Light Hydrotreated Feedstock) (ECHA)

생체 내 포유류 적혈구를 이용한 소핵시험결과, 음성 (OECD TG 474) (유사물질 자료: solvent-extracted, dewaxed paraffin oil) (ECHA)

- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 시험관내 포유류 유전자에서 염색체 이상시험결과 음성 (유사물질자료: CAS No. 64741-52-2) (OECD TG 473) (ECHA)
  시험관내 미생물을 이용한 복귀 돌연변이 시험결과 음성 (유사물질자료: CAS No. 64742-54-7 and 64742-52-5) (OECD TG 471) (ECHA)
  시험관내 포유류 세포를 이용한 유전자 돌연변이 시험결과 음성 (유사물질자료: CAS No. 64742-52-5) (OECD TG 476, GLP) (ECHA)
  생체내 포유류 적혈구를 이용한 소핵시험결과 음성 (유사물질자료: solvent-extracted, dewaxed paraffin oils, sufficiently refined, IP 346 < 3%) (OECD TG 474) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 생식독성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 랫드를 대상으로 생식/발달독성 스크리닝시험결과, 시험된 농도 어디에서도 생식능에 악영향을 미치지 않았고 신생아독성도 발견되지 않음 (유사물질 자료: Chevron 100 Neutral) (OECD TG 421, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 랫드(암/수)를 대상으로 1세대 생식독성시험결과, 관찰된 영향 없음(OECD TG 415, GLP) (유사물질 자료; Ethylflo 166 poly alpha olefin)(ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 랫드(암/수)를 대상으로 300, 1800, 12000 ppm의 농도로 1세대 생식독성시험결과, 시험된 최고 농도에서도 생식력에 영향을 나타내지 않음 (유사물질: 103-23-1) (OECD TG 415와 유사, GLP) (ECHA)
  랫드를 대상으로 28, 170, 1080 mg/kg의 농도로 발달독성시험결과, 시험된 최고 농도에서 골화 감소가 관찰되었으며 부정적인 것으로 간주되지 않으나 최소한의 태아

독성의 결과이므로 NOAEL= 약 170 mg/kg bw/day으로 평가됨 (유사물질: 103-23-1) (OECD TG 414와 유사, GLP) (ECHA)

- Distillates (petroleum), solvent-dewaxed light paraffinic : 랫드를 이용한 생식독성시험결과, 생식기능에 악영향을 유발하지 않음 (OECD TG 421, GLP)
  랫드를 이용한 태아발달독성시험결과, 자손 및 부모에게 독성영향을 유발하지 않음 (OECD TG 414) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 랫드(암/수)를 대상으로 1000 mg/kg/day의 농도로 생식/발달독성 스크리닝시험결과, 어느 농도에서도 생식능에 부정적인 영향을 미치지 않았으며, 신생아 독성 또한 관찰되지 않음 (OECD TG 421, GLP) (유사물질 자료: Chevron 100 Neutral) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 랫드(암/수)를 대상으로 1000 mg/kg/day의 농도로 생식/발달독성 스크리닝시험결과, 어느 농도에서도 생식능에 부정적인 영향을 미치지 않았으며, 신생아 독성 또한 관찰되지 않음 (OECD TG 421, GLP) (유사물질 자료: Chevron 100 Neutral) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 랫드를 대상으로 생식/발달독성 스크리닝 시험결과 생식관련 활동은 어느 투여 농도에서도 중대하게 영향받지 않음. 신생아 독성은 어느 투여 농도에서도 발견되지 않음 (유사물질자료: CAS No. 64742-54-7) (OECD TG 421, GLP) (ECHA)
  랫드를 대상으로 발달독성 시험결과 최기성의 증거 발견되지 않음. 외부, 골격, 또는 내장에서 투여 관련 변화 관찰되지 않음 (유사물질자료: CAS No. 64741-88-4) (OECD TG 414) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 표적장기·전신독성물질(1회노출) : 분류되지 않음

- Distillates (petroleum), : 랫드(암/수)를 대상으로 급성 경구독성시험결과, 사망개체 없었으며 한마리의 오른

hydrotreated heavy paraffinic		쪽 신장에 수신증 관찰되었으나 시험물질의 투여와 관련된 것은 아니며, 다른 이상 증상은 관찰되지 않음 (유사물질 자료: 64742-56-9) (OECD TG 401, GLP) (ECHA) 토끼(암/수)를 대상으로 급성 경피독성시험결과, 5000 mg/kg bw의 농도에서 피부 자극이나 임상 독성의 징후를 야기하지 않았으며 육안 부검에서 전신독성의 징후 또한 관찰되지 않음 (유사물질 자료: 64742-56-9) (OECD TG 402, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated	:	랫드(암/수)를 대상으로 급성경구독성시험결과, 5000 mg/gk 투여군에서 전신독성의 징후 관찰되지 않음 (OECD TG 401, GLP) (유사물질 자료: Alkane 4) (ECHA) 랫드(암/수)를 대상으로 급성경피독성시험 및 급성흡입독성시험결과, 전신독성의 징후나 육안적 이상증상 관찰되지 않음 (OECD TG 402, GLP) (유사물질 자료; Alkane 4)(ECHA)
- Trade secret	:	자료없음
- Diisononyl adipate	:	랫드(암/수)를 대상으로 급성 흡입독성시험결과, 사망개체 없었으며 영향 관찰되지 않음. 4h-LC50 > 5.7 mg/L (유사물질: 103-23-1) (OECD TG 403, GLP) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic	:	랫드를 대상으로 급성경구독성시험결과, 임상독성 증상 관찰되지 않음. LD50 > 5000 mg/kg bw, 사망없음 (OECD TG 401, GLP) (ECHA) 토끼를 대상으로 급성경피독성시험결과, 뚜렷한 임상독성 증상 관찰되지 않음. LD50 > 5000 mg/kg bw, 사망없음 (OECD TG 402, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts	:	자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic	:	랫드(암/수)를 대상으로 급성경구독성시험결과, 독성의 임상 증상 관찰되지 않음. LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 401, GLP) (유사물질 자료: 64742-56-9) (ECHA) 토끼(암/수)를 대상으로 급성경피독성시험결과, 뚜렷한 임상 독성의 증후는 관찰되지 않음. LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 402, GLP) (유사물질 자료: 64742-56-9) (ECHA) 랫드(암/수)를 대상으로 급성흡입독성시험결과, 노출이 감소되고 관찰 10일째까지 개체 털에 물질 침전. 그룹간 평균 체중에 통계학적으로 유의미한 차이 없음. LC50 > 5.53 mg/L air /4h, 사망없음 (OECD TG 403) (유사물질 자료: MRD-87-102) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy	:	랫드(암/수)를 대상으로 급성경구독성시험결과, 독성의 임상 증상 관찰되지 않음. LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 401, GLP) (유사물질 자료: 64742-56-9) (ECHA) 토끼(암/수)를 대상으로 급성경피독성시험결과, 뚜렷한 임상 독성의 증후는 관찰되지 않음. LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 402, GLP) (유사물질 자료: 64742-56-9) (ECHA) 랫드(암/수)를 대상으로 급성흡입독성시험결과, 노출이 감소되고 관찰 10일째까지 개체 털에 물질 침전. 그룹간 평균 체중에 통계학적으로 유의미한 차이 없음. LC50 > 5.53 mg/L air /4h, 사망없음 (OECD TG 403) (유사물질 자료: MRD-87-102) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based	:	랫드를 대상으로 급성경구독성 시험결과 암/수 개체에서 독성관련 임상적 징후 관찰되지 않음. LD50 > 5000 mg/kg bw, 사망없음 (유사물질자료: CAS No. 64742-56-9) (OECD TG 401, GLP) (ECHA) 랫드를 대상으로 급성경피독성 시험결과 몇몇 개체들에서 피부 자극과 부드러운 변이 관찰되었으나 일시적임. LD50 > 2000 mg/kg bw, 사망없음 (유사물질자료: CAS No. 64742-53-6) (OECD TG 402, GLP) (ECHA)

랫드를 대상으로 급성에어로졸흡입독성 시험결과 모든 개체들을 방에서 내보낸 결과 털에 상당한 양의 시험 물질이 남아있음. 노출 후 시험 물질이 털에 남아있는 개체 수는 감소했고 10일 째에는 없음, LC50 > 5.53 mg/L air 4시간, 사망없음; (유사물질자료: CAS No. 64741-88-4) (OECD TG 403) (ECHA)

- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 표적장기·전신독성물질(반복노출) : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 토끼를 대상으로 28일간 아급성 경피독성시험결과, 전신독성 영향이 관찰되지 않았으므로 NOAEL(전신독성)=1,000 mg/kg로 설정됨 (유사물질 자료 : 64742-53-6) (OECD TG 410, GLP) (ECHA)
  랫드를 대상으로 4주간 0, 50, 220, 1000 mg/m3의 농도로 아급성 흡입독성시험결과, 전신 영향이 관찰되지 않음. 폐 내 오일 침착과 관련된 폐 변이에 대한 NOAEL=220 mg/m3로, 총체적 NOAEL(전신영향)은 전신독성이 관찰되지 않았으므로 > 980 mg/m3로 설정됨 (유사물질 자료 : 64742-70-7) (OECD TG 412와 유사) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 랫드(암/수)를 대상으로 0; 1000; 7000; 50,000 ppm의 농도로 90일간 반복경구투여시험결과, 시험물질 투여와 관련된 영향 관찰되지 않음 (NOAEL=50000 ppm) (OECD TG 408, GLP) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 랫드(암/수)를 대상으로 12000, 25000 ppm의 농도로 102주간 만성 경구투여시험결과, 시험된 최고 농도에서 체중 및 체중 증가결과에 근거하여 NOAEL = 12000 ppm으로 간주됨 (유사물질: 103-23-1) (OECD TG 451과 유사) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 랫드(암/수)를 대상으로 급성경구독성시험결과, 독성의 임상 증상 관찰되지 않음. LD50 > 5000 ㎎/㎏ bw, 사망없음 (OECD TG 401, GLP) (유사물질 자료: 64742-56-9) (ECHA)

토끼(암/수)를 대상으로 급성경피독성시험결과, 뚜렷한 임상 독성의 증후는 관찰되지 않음. LD50 > 5000 ㎎/kg bw, 사망없음 (OECD TG 402, GLP) (유사물질 자료: 64742-56-9) (ECHA)
랫드(암/수)를 대상으로 급성흡입독성시험결과, 노출이 감소되고 관찰 10일째까지 개체 털에 물질 침전. 그룹간 평균 체중에 통계학적으로 유의미한 차이 없음. LC50 > 5.53 mg/L air /4h, 사망없음 (OECD TG 403) (유사물질 자료: MRD-87-102) (ECHA)

- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 토끼(암/수)를 대상으로 반복경피독성시험결과, 시험된 최고 농도에서 전신 악영향이 관찰되지 않았으므로 NOAEL = 1,000 mg/kg (OECD TG 410, GLP) (유사물질 자료: 64742-53-6) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 랫드(암/수)를 대상으로 13주간 반복경피독성시험결과, 전신 또는 국소 영향은 유의미하지 않은 것으로 판단되므로 NOAEL ≥ 2000 mg/kg/day. (OECD TG 411) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 랫드를 대상으로 아급성 경구투여시험결과 125 mg/kg 농도로 투여된 모든 개체는 예정된 희생되는 날 이전까지 살아남음. 임상적 징후 관찰되지 않음. NOAEL은 경구투여시 125mg/kg보다 작지만 정확한 값은 밝혀지지 않음 (OECD TG 408) (ECHA)
토끼를 대상으로 반복경피독성 시험결과 1000 mg/kg 농도에서 전신 부작용의 영향은 경미하며 NOAEL 은 1000 mg/kg 농도로 설정되었음 (유사물질자료: CAS No. 64742-53-6) (OECD TG 410, GLP) (ECHA)
랫드를 대상으로 반복흡입독성 시험결과 전신에 미치는 영향 관찰되지 않음에 따라 NOAEL은 > 980 mg/m3 (0.980 mg/L) 로 결정됨 (유사물질자료: CAS No. 64742-70-7) (OECD TG 412) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 흡인유해성 : 분류되지 않음

- Distillates (petroleum), hydrotreated heavy paraffinic : 동점도 : 73.9 mm2/s (40°C)(ECHA)이면서 탄화수소류
- 1-Dodecene homopolymer, hydrogenated : 40°C에서 25.3-44.3 mm2/s의 동점도를 가지며 (ECHA) 탄화수소류 아님
- Trade secret : 자료없음
- Diisononyl adipate : 9.6 mPa s (40°C)의 동점도를 가지며 탄화수소류 아님
- Distillates (petroleum), solvent-dewaxed light paraffinic : 8.4 mm2/s (40°C) (ECHA)의 동점도를 갖는 탄화수소류
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 52.1 mm2/s (40°C) (ECHA)의 동점도를 갖는 탄화수소류
- Paraffin oils (petroleum), catalytic dewaxed heavy : >2 mm²/s (40 °C) (ECHA) & 탄화수소류
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : > 2 mm2/s (40°C) (CONCAWE, 2010a; CONCAWE, 1984; CONCAWE, 1997) 의 동점도를 가지며 (ECHA) & 탄화수소류임
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

12. 환경에 미치는 영향

가. 생태독성

- 급성 수생 환경유해성 : 분류되지 않음 (ATEmix>1mg/L)
- 만성 수생 환경유해성 : 분류되지 않음

○ 급성 수생 환경유해성

어류

- Distillates (petroleum), hydrotreated heavy paraffinic : 96h-LL50(Pimephales promelas) > 100 mg/L (OECD TG 203, GLP)(ECHA)
- 1-Dodecene homopolymer, hydrogenated : 96h-LL50(Oncorhynchus mykiss) > 1000 mg/l(OECD TG 203, GLP) (유사물질 자료: 1-Dodecene, dimer with 1-decene, hydrogenated) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 수용해도 (0.0032 mg/L) 한계까지 독성 영향이 관찰되지 않음 (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 96h-LL50(Pimephales promelas) > 100 mg/L (OECD TG 203, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 96h-LL50(Pimephales promelas) > 100 mg/L (OECD TG 203, GLP) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 96h-LL50(Pimephales promelas) > 100 mg/L (OECD TG 203, GLP) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 96h-LL50(Pimephales promelas) > 100 mg/L (OECD TG 203, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

갑각류

- Distillates (petroleum), hydrotreated heavy paraffinic : 48h-EL50(Daphnia magna) > 10,000 mg/L (유사물질 자료: 64742-53-6 또는 64741-97-5) (OECD TG 202와 유사) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 48h-EL50(Daphnia magna) > 1000 mg/l(OECD TG 202, GLP) (유사물질 자료: Alkane 5, 1-decene/1-dodecene homopolymer hydrogenated) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 수용해도 (0.0032 mg/L) 한계까지 독성 영향이 관찰되지 않음 (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 48h-EL50(Daphnia magna) > 10000 mg/L (OECD TG 202) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 48h-EL50(Daphnia magna) > 10000 mg/L (OECD TG 202) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 48h-EL50(Daphnia magna) > 10000 mg/L (OECD TG 202) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 48h-EL50(Daphnia magna) > 10000

mg/L (OECD TG 202) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

조류
- Distillates (petroleum), hydrotreated heavy paraffinic : 자료없음
- 1-Dodecene homopolymer, hydrogenated : 72h-ErL50(Scenedesmus capricornutum) > 1000 mg/l(OECD TG 201, GLP) (유사물질 자료: Nexbase 2002) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 수용해도 (0.0032 mg/L) 한계까지 독성 영향이 관찰되지 않음 (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 자료없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 자료없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 자료없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 만성 수생 환경유해성

어류
- Distillates (petroleum), hydrotreated heavy paraffinic : 자료없음
- 1-Dodecene homopolymer, hydrogenated : 자료없음
- Trade secret : 자료없음
- Diisononyl adipate : 자료없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 자료없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 자료없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 14d-NOELR(Oncorhynchus mykiss) >= 1000 mg/L (예측치) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

갑각류

- Distillates (petroleum), hydrotreated heavy paraffinic : 21d-NOEL(Daphnia magna)=10 mg/L (유사물질: 64742-53-6) (OECD TG 211과 유사, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 21d-NOELR(Daphnia magna)=125 mg/l(OECD TG 211, GLP) (유사물질 자료: Durasyn 162) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 수용해도 (0.0032 mg/L) 한계까지 독성 영향이 관찰되지 않음 (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 21d-NOEL(Daphnia magna) = 10 mg/L (OECD TG 211, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 21d-NOEL(Daphnia magna) = 10 mg/L (OECD TG 211, GLP) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 21d-NOEL(Daphnia magna) = 10 mg/L (OECD TG 211, GLP) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 21d-NOEL(Daphnia magna) = 10 mg/L (OECD TG 211, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

조류

- Distillates (petroleum), hydrotreated heavy paraffinic : 72h-NOErL(Pseudokirchnerella subcapitata) >= 100 mg/L (유사물질: 72623-87-1) (OECD TG 201) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 72h-NOELR(Scenedesmus capricornutum)=1000 mg/l(OECD TG 201, GLP) (유사물질 자료: Nexbase 2002) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 수용해도 (0.0032 mg/L) 한계까지 독성 영향이 관찰되지 않음 (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 72h-NOErL(Pseudokirchneriella subcapitata) >=100 mg/L (OECD TG 201) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 72h-NOErL(Pseudokirchneriella subcapitata) >=100 mg/L (OECD TG 201) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 72h-NOErL(Pseudokirchneriella subcapitata) >=100 mg/L (OECD TG 201) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 72h-NOEL(Pseudokirchneriella subcapitata) >= 100 mg/L (OECD TG 201) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

나. 잔류성 및 분해성

○ **잔류성**

- Distillates (petroleum), hydrotreated heavy paraffinic : 본 물질은 UVCB이므로 해당없음 (ECHA)
- 1-Dodecene homopolymer, hydrogenated : log Kow > 6.5 (20 °C) (OECD TG 117, GLP) (유사물질 자료) (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : log Kow = >= 9.56 - <= 10.4 (25 °C) (OECD TG 117) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : log Kow = 6.13 (실험치) (EPISUITE)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : log Kow = 6.13 (실험치) (EPISUITE)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : log Kow = 6.43 (예측치) (EPISUITE)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ **분해성**

- Distillates (petroleum), hydrotreated heavy paraffinic : 기타 윤활기유 카테고리를 구성하는 화학물질은 전적으로 탄소와 수소로 구성되어 있으며 가수분해성 작용기를 포함하지 않으므로 이러한 가수분해 과정은 환경에서 제거되는 데 기여하지 않음 (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 자료없음
- Trade secret : 자료없음
- Diisononyl adipate : 대기로 증발 또는 노출 후 광화학적 과정에 의해 빠르게 분해됨 (ECHA) 빠르게 분해되므로 가수분해는 관련 분해경로가 아님 (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 자료없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 자료없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 가수분해 가능성 매우 낮음 (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

다. 생물농축성

○ **생물농축성**

- Distillates (petroleum), hydrotreated heavy paraffinic : 본 물질은 UVCB이므로 해당없음 (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 이 카테고리류의 물질은 생물축적하지 않는 것으로 예상됨 (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : BCF = 267.7 (예측치) (EPISUITE)
- Distillates (petroleum), solvent-dewaxed light paraffinic : BCF = 5147 (EPISUITE)

- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : BCF = 5147 (예측치) (EPISUITE)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : BCF = 8137 (예측치) (EPISUITE)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

○ 생분해성

- Distillates (petroleum), hydrotreated heavy paraffinic : 본 물질은 본질적으로 생분해되나 쉽게 생분해되지 않는 (28일 후 31% 생분해됨)것으로 확인됨 (유사물질 자료: Solvent Neutral 600 Base Oil (MRD-94-981)) (OECD TG 301F, GLP) (ECHA)
- 1-Dodecene homopolymer, hydrogenated : 28일 후 66% 생분해됨 (OECD TG 301D, GLP) (유사물질 자료: 1-Dodecene, dimer with 1-decene, hydrogenated); 10일 창 기준을 충족하지 않으므로 쉬운 생분해성 물질 아님 (ECHA)
- Trade secret : 자료없음
- Diisononyl adipate : 28일 후 90 % 이상 생분해됨; 이분해성 (OECD TG 301F와 유사, GLP) (ECHA)
- Distillates (petroleum), solvent-dewaxed light paraffinic : 28일 후 31% 생분해됨; 난분해성 (OECD TG 301F, GLP) (ECHA)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 28일 후 31 % 생분해됨; 난분해성 (OECD TG 301F, GLP) (ECHA)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 28일 후 31 % 생분해됨; 난분해성 (OECD TG 301F, GLP) (ECHA)
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 28일 후 31% 생분해됨; 본질적으로 생분해됨 (OECD TG 301F, GLP) (ECHA)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

라. 토양이동성

- Distillates (petroleum), hydrotreated heavy paraffinic : 자료없음
- 1-Dodecene homopolymer, hydrogenated : 자료없음
- Trade secret : 자료없음
- Diisononyl adipate : Koc=803200 (예측치) (EPISUITE)
- Distillates (petroleum), solvent-dewaxed light paraffinic : Koc = 208800 (EPISUITE)
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : Koc=208800 (EPISUITE)
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음

- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : Koc = 380400 (예측치) (EPISUITE)
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

마. 오존층 유해성

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 자료없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

바. 기타 유해 영향

- Distillates (petroleum), hydrotreated heavy paraffinic : 자료없음
- 1-Dodecene homopolymer, hydrogenated : 자료없음
- Trade secret : 자료없음
- Diisononyl adipate : 자료없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 자료없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 자료없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 자료없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 자료없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 자료없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 자료없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 자료없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 자료없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 자료없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 자료없음

13. 폐기시 주의사항

가. 폐기방법

- 기름과 물을 분리하여 분리된 기름성분은 소각하고, 분리한 후 남은 물은 수질오염방지시설에서 처리하시오.
- 증발・농축방법으로 처리한 후 그 잔재물은 소각하거나 안정화 처리하시오.
- 응집・침전방법으로 처리한 후 그 잔재물은 소각하시오.
- 분리・증류・추출・여과・열분해의 방법으로 정제 처리하시오.
- 소각하거나 안정화 처리 하시오.
- 폐기물관리법에 의한 지정폐기물에 해당하는 처리기준 및 방법에 따라 처분하시오.

나. 폐기시 주의사항

- 사업장폐기물을 배출하는 사업자(사업장폐기물배출자)는 사업장에서 발생하는 폐기물을 스스로 처리하거나, 폐기물 처리업의 허가를 받은 자, 다른 사람의 폐기물을 재활용하는 자, 폐기물 처리시설을 설치 운영하는 자 또는 해양오염방지법 규정에 의하여 폐기물해양배출업을 등록한 자에게 위탁하여 처리하시오.
- 폐기물관리법상 규정에 명시된 처리 시 주의사항을 고려하시오.

14. 운송에 필요한 정보

가. 유엔번호(UN No.)

- 해당없음

나. 적정선적명

- 해당없음

다. 운송에서의 위험성 등급

- 해당없음

라. 용기등급

- 해당없음

마. 해양오염물질

- 해당없음

바. 사용자가 운송 또는 운송수단에 관련해 알 필요가 있거나 필요한 특별한 안전대책

- 화재시 비상조치의 종류 : 해당없음
- 유출시 비상조치의 종류 : 해당없음
- 육상/해상/항공 운송규제사항(ADR/RID, AND, IMDG, ICAO/IATA)에 의한 분류 및 규제 : 해당없음

15. 법적 규제현황

가. 산업안전보건법에 의한 규제

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 노출기준설정물질

- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

나. 화학물질관리법에 의한 규제 - PRODUCT : 해당없음

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 배출량조사대상물질
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

다. 화학물질의등록 및 평가 등에관한 법률에 의한 규제

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

라. 위험물안전관리법에 의한 규제 - PRODUCT : 제4류 인화성액체제4석유류, 6000L

- Distillates (petroleum), hydrotreated heavy paraffinic : 위험물
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 위험물
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음

- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

마. 폐기물관리법에 의한 규제 - PRODUCT : 지정폐기물- 폐유(액체상태)

바. 기타 국내 및 외국법에 의한 규제

○ 고압가스안전관리법

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

○ 잔류성유기오염물질관리법

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

○ **EU 규제정보**

EU 분류정보(확정분류결과)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

EU 분류정보(위험문구)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

EU 분류정보(안전문구)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음

- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

REACH 제한물질

- Distillates (petroleum), hydrotreated heavy paraffinic : REACH 제한물질
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : REACH 제한물질
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : REACH 제한물질
- Paraffin oils (petroleum), catalytic dewaxed heavy : REACH 제한물질
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : REACH 제한물질
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

REACH 허가대상물질

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

REACH SVHC

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음

- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

EU PBT

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

○ 미국 규제정보

미국관리정보(OSHA 규정)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-

ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

미국관리정보(CERCLA 규정)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

미국관리정보(EPCRA 302 규정)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

미국관리정보(EPCRA 304 규정)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음

- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

미국관리정보(EPCRA 313 규정)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

○ 국제협약 정보

로테르담 협약물질

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

스톡홀름 협약물질

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

몬트리올 의정서물질

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

○ National Inventory

유럽 기존화학물질 Inventory(EINECS)

- Distillates (petroleum), hydrotreated heavy paraffinic : 유럽 EINECS 기존화학물질
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 유럽 EINECS 기존화학물질
- Distillates (petroleum), solvent-dewaxed light paraffinic : 유럽 EINECS 기존화학물질
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 유럽 EINECS 기존화학물질
- Paraffin oils (petroleum), catalytic dewaxed heavy : 유럽 EINECS 기존화학물질
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 유럽 EINECS 기존화학물질
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-

hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

유럽 신고화학물질 Inventory(ELINCS)
- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 해당없음
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 해당없음
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

미국 기존화학물질 Inventory(TSCA)
- Distillates (petroleum), hydrotreated heavy paraffinic : 미국 TSCA 기존화학물질
- 1-Dodecene homopolymer, hydrogenated : 미국 TSCA 기존화학물질
- Trade secret : 해당없음
- Diisononyl adipate : 미국 TSCA 기존화학물질
- Distillates (petroleum), solvent-dewaxed light paraffinic : 미국 TSCA 기존화학물질
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 미국 TSCA 기존화학물질
- Paraffin oils (petroleum), catalytic dewaxed heavy : 미국 TSCA 기존화학물질
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 미국 TSCA 기존화학물질
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 미국 TSCA 기존화학물질
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 미국 TSCA 기존화학물질
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 미국 TSCA 기존화학물질
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

중국 기존화학물질 Inventory(IECSC)
- Distillates (petroleum), hydrotreated heavy paraffinic : 중국 기존화학물질
- 1-Dodecene homopolymer, hydrogenated : 중국 기존화학물질
- Trade secret : 해당없음

- Diisononyl adipate : 중국 기존화학물질
- Distillates (petroleum), solvent-dewaxed light paraffinic : 중국 기존화학물질
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 중국 기존화학물질
- Paraffin oils (petroleum), catalytic dewaxed heavy : 중국 기존화학물질
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 중국 기존화학물질
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 해당없음
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

일본 기존화학물질 Inventory(ENCS)

- Distillates (petroleum), hydrotreated heavy paraffinic : 해당없음
- 1-Dodecene homopolymer, hydrogenated : 해당없음
- Trade secret : 해당없음
- Diisononyl adipate : 일본 ENCS 기존화학물질
- Distillates (petroleum), solvent-dewaxed light paraffinic : 해당없음
- Phosphorodithioic acid O,O-dialkyl(C=3-14) esters zinc salts : 해당없음
- Distillates (petroleum), solvent-dewaxed heavy paraffinic : 일본 ENCS 기존화학물질
- Paraffin oils (petroleum), catalytic dewaxed heavy : 해당없음
- Lubricating oils (petroleum), (C=15-30), hydrotreated neutral oil-based : 해당없음
- 1-Tridecanamine, N-tridecyl-, branched, reaction products with carbon disulfide 2-ethyl-N-(2-ethylhexyl)- 1-hexanamine and molybdenum oxide (MoO3) : 일본 ENCS 기존화학물질
- Bis(ditridecylcarbamodithioato-κS,κS']dioxodi-μ-thioxodimolybdenum, branched : 해당없음
- Molybdenum, [N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S'](N,N-ditridecylcarbamodithioato-.kappa.S,.kappa.S')dioxodi-.mu.-thioxodi-, branched : 해당없음
- Molybdenum, bis[N,N-bis(2-ethylhexyl)carbamodithioato-.kappa.S,.kappa.S']dioxodi-.mu.-thioxodi- : 해당없음
- 2-Propenoic acid ethyl ester polymer with alkyl(C=1~7) alkyl(C=1~11) alkenoate : 해당없음

16. 기타 참고사항

가. 자료의 출처

- 본 MSDS는 내부 기술데이터 및 OECD eChemPortal, ECHA, NITE, TOXNET, IPCS, KOSHA 등을 근거로 작성하였음.

나. 최초작성일자

- 2014-10-01

다. 개정횟수 및 최종 개정일자

○ 개정횟수

- 4

○ 최종 개정일자

- 2026-01-05

○ 최종개정이력

- 화학성분 조성 및 회사에 관한 정보 개정

라. 기타

- 본 MSDS는 산업안전보건법 제110조 및 고용노동부고시 제2025-50호(화학물질의 분류·표시 및 물질안전보건자료에 관한 기준)에 근거하여 국내 관련 규제 법규 현황 등을 고려하여 기술함. 본 MSDS에 포함된 정보는 당사의 최신 지식 및 경험을 바탕으로 제품안전취급 관련 정보에 대해서만 기술한 것이며, 본 MSDS는 제품의 기술자료(TDS), 시험성적서(CoA) 및 규격합의서로(Specification agreement) 사용될 수 없음. 본 제품의 사용자는 현행 법률이 정한 규정을 확인하여 준수할 책무가 있음.