

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product code : Lub002080
 Type of product : Lubricant
 Product group : Lubricant

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Lubricant
 Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rymax b.v.
 Delweg 8
 6902 PJ Zevenaar
 T +31 (0)316 740840 - F +31 (0)316 740844
info@rymax-lubricants.com - www.rymax-lubricants.com

1.4. Emergency telephone number

Emergency number : +31 (0)316 740840

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.
 EUH208 - Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.

2.3. Other hazards

Other hazards not contributing to the classification : Flammable liquids. Prolonged or repeated skin contact with the material will remove natural oils which leads to a dermatitis. Spills of this product present a serious slipping hazard.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-Decene, homopolymer, hydrogenated	(CAS-No.) 68037-01-4 (EC-No.) 500-183-1 (REACH-no) 01-2119486452-34	>= 75	Asp. Tox. 1, H304

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.]	(CAS-No.) 72623-87-1 (EC-No.) 276-738-4 (EC Index-No.) 649-483-00-5 (REACH-no) 01-2119474889-13	1 - 10	Asp. Tox. 1, H304
1-Dodecene, trimer, hydrogenated	(CAS-No.) 68037-01-4 (EC-No.) 500-183-1 (REACH-no) 01-2119486452-34	1 - 5	Asp. Tox. 1, H304
Zinc bis(O-(6-methylheptyl)) bis (O(sec-butyl)) bis dithiophosphate)	(CAS-No.) 93819-94-4 (EC-No.) 298-577-9 (REACH-no) 01-2119543726-33	0,5 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
bis(nonylphenyl)amine	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911, 01-2119488911-28	0,1 - 5	Aquatic Chronic 4, H413
C14-16-18 Alkyl phenol	(EC-No.) 931-468-2 (REACH-no) 01-2119498288-19	0,1 - 5	Skin Sens. 1B, H317 STOT RE 2, H373

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Zinc bis(O-(6-methylheptyl)) bis (O(sec-butyl)) bis dithiophosphate)	(CAS-No.) 93819-94-4 (EC-No.) 298-577-9 (REACH-no) 01-2119543726-33	(6,25 <C <= 100) Skin Irrit. 2, H315 (10 <C <= 12,5) Eye Irrit. 2, H319 (12,5 <C <= 100) Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after inhalation	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after skin contact	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after ingestion	: After adequate first aid, no further treatment is required unless symptoms reappear.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Eliminate all ignition sources if safe to do so.
Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool.
Storage temperature	: 45 °C
Storage area	: Store away from heat. Store in a well-ventilated place.
Special rules on packaging	: Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate) (93819-94-4)		
USA - ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA - ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³
bis(nonylphenyl)amine (36878-20-3)		
USA - ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA - ACGIH	ACGIH STEL (mg/m ³)	10 fibers/cm ³
USA - ACGIH	ACGIH STEL (ppm)	0 ppm
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.] (72623-87-1)		
EU	IOELV TWA (mg/m ³)	5 mg/m ³
EU	IOELV STEL (mg/m ³)	10 mg/m ³

8.2. Exposure controls

Appropriate engineering controls:

Use adequate ventilation to keep oil mist below applicable standard. Use splash goggles when eye contact due to splashing is possible. Ocular shower with suitable liquid.

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Avoid all unnecessary exposure.

Materials for protective clothing:

Wear suitable protective clothing

Hand protection:

Breakthrough time : refer to the recommendations of the supplier

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes)	0.7	3 (> 0.65)	EN 374
	Polyvinylchloride (PVC)	2 (> 30 minutes)	0.4	3 (> 0.65)	EN 374

Eye protection:

Chemical goggles or safety glasses. Use splash goggles when eye contact due to splashing is possible. EN 166

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Skin and body protection:

Avoid prolonged and repeated contact with skin. If repeated skin contact or contamination of clothing is likely, protective clothing should be worn

Respiratory protection:

Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment. Particle filter. EN 143

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Characteristics.
Colour	: Brown.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -45 °C
Boiling point	: No data available
Flash point	: > 201 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 848 kg/m ³ @15°C
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: 165,1 mm ² /s @40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

Other properties : See Product Data Sheet for detailed information.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

1-Dodecene, trimer, hydrogenated (68037-01-4)	
LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rabbit)	> 2000 mg/kg

1-Decene, homopolymer, hydrogenated (68037-01-4)	
LD50 oral (rat)	5000 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	5,2 mg/l/4h

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate (93819-94-4)	
LD50 oral (rat)	2600 mg/kg
LD50 dermal (rabbit)	> 3160 mg/kg OECD 402

bis(nonylphenyl)amine (36878-20-3)	
LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rat)	> 2000 mg/kg

C14-16-18 Alkyl phenol	
LD50 oral (rat)	5000 mg/kg
LD50 dermal (rabbit)	> 2000 mg/kg

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

1-Decene, homopolymer, hydrogenated (68037-01-4)	
NOAEL (oral, rat, 90 days)	4159,4 mg/kg bodyweight/day
NOAEL (subacute, oral, animal/male, 28 days)	6245 mg/kg bodyweight

Aspiration hazard : Not classified

Apollo R SAE 10W/60	
Viscosity, kinematic	165,1 mm ² /s @40°C

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

1-Dodecene, trimer, hydrogenated (68037-01-4)	
LC50 fish 1	750 mg/l
EC50 Daphnia 1	1000 mg/l
EC50 96h algae (1)	96 mg/l
NOEC chronic algae	> ng/l

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate (93819-94-4)	
LC50 fish 1	4,5 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 Daphnia 1	5,4 mg/l EC50 48h - Daphnia magna [mg/l]
EC50 96h algae (1)	2,1 mg/l Selenastrum capricornutum

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

bis(nonylphenyl)amine (36878-20-3)	
LC50 fish 1	> 100 mg/l Danio rerio
EC50 Daphnia 1	> 100 mg/l Daphnia magna
EC50 72h algae (1)	> 100 mg/l Desmodesmus subspicatus
NOEC chronic algae	100 mg/l

12.2. Persistence and degradability

1-Dodecene, trimer, hydrogenated (68037-01-4)	
Persistence and degradability	Not biodegradable.

1-Decene, homopolymer, hydrogenated (68037-01-4)	
Persistence and degradability	Not readily biodegradable.

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate (93819-94-4)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1,5 % OECD-testrichtlijn 301 B

bis(nonylphenyl)amine (36878-20-3)	
Persistence and degradability	Not biodegradable.
Biodegradation	1 % 28 Days (OECD 301 B)

12.3. Bioaccumulative potential

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate (93819-94-4)	
Log Pow	0,9 @23°C

bis(nonylphenyl)amine (36878-20-3)	
Bioconcentration factor (BCF REACH)	1730
Log Pow	> 7,6
Bioaccumulative potential	Bioaccumulative potential.

12.4. Mobility in soil

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate (93819-94-4)	
Ecology - soil	Adsorbs into the soil.

bis(nonylphenyl)amine (36878-20-3)	
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose of contents/container to an approved waste disposal plant, See Directive 2001/118/EC.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 2, significant hazard to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

Ministry's list of carcinogens : Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate is listed

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Ministry's list of mutagens	: Zinc bis(O-(6-methylheptyl)) bis (O(sec-butyl)) bis dithiophosphate) is listed
NON-exhaustive list of reproductive toxins - Breastfeeding	: None of the components are listed
NON-exhaustive list of reproductive toxins - Fertility	: None of the components are listed
NON-exhaustive list of reproductive toxins - Evolution	: None of the components are listed

Denmark

Danish National Regulations	: Pregnant/breastfeeding women working with the product must not be in direct contact with the product
-----------------------------	--

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
2.2	EUH-statements	Modified	
3	Composition/information on ingredients	Modified	
8.2	Skin and body protection	Modified	
8.2	Hand protection	Modified	
9.1	Freezing point	Modified	
9.1	Viscosity, kinematic	Modified	
9.1	Odour	Removed	
9.1	Flash point	Modified	
9.1	Colour	Modified	
9.1	Density	Modified	

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2

Apollo R SAE 10W/60

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II) RYMAX

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness