

## Safety Data Sheet

### ASTRON 80W-90 TDL

Revision date: 02.02.2022

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

##### 1.1. Product identifier

ASTRON 80W-90 TDL

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

###### Use of the substance/mixture

gear oil

###### Uses advised against

No information available.

##### 1.3. Details of the supplier of the safety data sheet

Company name:	Duran Lubricants & Chemicals GmbH	
Street:	Rodderheide 3-7	
Place:	D-33824 Werther	
Telephone:	+49 (0)5203-901510	Fax: +49 (0)5203-901515
e-mail:	info@duran-oil.com	
Internet:	www.fosser.de	
Responsible Department:	Produktsicherheit / Product Safety	
	info@duran-oil.com	

##### 1.4. Emergency telephone number:

Giftinformationszentrum Nord  
(Göttingen)+49 (0)551/19240

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

##### 2.2. Label elements

###### Regulation (EC) No. 1272/2008

###### Special labelling of certain mixtures

EUH208 Contains Alkylamine trialkyldithiophosphate. May produce an allergic reaction.

##### 2.3. Other hazards

No information available.

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

###### Chemical characterization

Preparation of base oils and additives.

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#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified			< = 2,5 %
	265-158-7	649-468-00-3	01-2119487077-29	
	Asp. Tox. 1; H304			
	methacrylate copolymer			< = 2,5 %
	Eye Irrit. 2; H319			
	Alkylamine trialkyldithiophosphate			< = 1,0 %
	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1B, Aquatic Chronic 2; H302 H318 H317 H411			
91648-65-6	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol			< = 1,0 %
	293-927-7		01-2119976351-35	
	Aquatic Chronic 3; H412			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64742-55-8	265-158-7	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified	< = 2,5 %
		dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
		Alkylamine trialkyldithiophosphate	< = 1,0 %
		oral: ATE = 500 mg/kg	
91648-65-6	293-927-7	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol	< = 1,0 %
		inhalation: LC50 = > 2,75 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 10000 mg/kg	

#### Further Information

This mixture contains no substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Remove affected person from the danger area and lay down.  
 Do not leave affected person unattended.  
 In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### After inhalation

Remove person to fresh air and keep comfortable for breathing.  
 In all cases of doubt, or when symptoms persist, seek medical advice.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

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Take off contaminated clothing and wash it before reuse.

In case of skin irritation, consult a physician.

#### **After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

#### **After ingestion**

Rinse mouth thoroughly with water.

Let water be drunk in little sips (dilution effect).

Do NOT induce vomiting.

In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

#### **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**

Use water spray jet to protect personnel and to cool endangered containers.

Co-ordinate fire-fighting measures to the fire surroundings.

- Extinguishing powder
- Carbon dioxide (CO<sub>2</sub>)
- Water spray jet

##### **Unsuitable extinguishing media**

High power water jet.

#### **5.2. Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

In case of fire may be liberated:

- Carbon monoxide (CO)
- Carbon dioxide (CO<sub>2</sub>).
- Nitrogen oxides (NO<sub>x</sub>)
- Pyrolysis products, toxic

#### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Use of protective clothing

In case of fire and/or explosion do not breathe fumes.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

##### **General measures**

Keep people at a distance and stay on the windward side.

Special danger of slipping by leaking/spilling product.

##### **For non-emergency personnel**

Wear protective gloves/protective clothing and eye/face protection.

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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Do not allow to enter into soil/subsoil.  
Prevent spread over a wide area (e.g. by containment or oil barriers).

#### **6.3. Methods and material for containment and cleaning up**

##### **For containment**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.  
Remove from the water surface (e.g. skimming, sucking).

#### **6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid formation of oil dust.  
Use personal protection equipment.  
Do not put any product-impregnated cleaning rags into your trouser pockets.  
Clear spills immediately.

##### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.  
Take precautionary measures against static discharges.  
Keep away from sources of ignition - No smoking.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep container tightly closed and in a well-ventilated place.  
Keep only in the original container. Store in a cool dry place. (Protect from moisture.)  
Floors should be impervious, resistant to liquids and easy to clean.

##### **Hints on joint storage**

Do not store together with:  
- Materials capable of ignition under almost all normal temperature conditions  
- Explosives

#### **7.3. Specific end use(s)**

gear oil

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

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#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
DNEL type				
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified			
Worker DNEL, long-term	inhalation	systemic		2,73 mg/m <sup>3</sup>
Worker DNEL, long-term	inhalation	local		5,58 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic		0,97 mg/kg bw/day
Consumer DNEL, long-term	inhalation	local		1,19 mg/m <sup>3</sup>
Consumer DNEL, long-term	oral	systemic		0,74 mg/kg bw/day
91648-65-6	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol			
Worker DNEL, long-term	inhalation	systemic		4,408 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic		6,25 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic		1,087 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic		3,125 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic		0,625 mg/kg bw/day

#### PNEC values

CAS No	Substance	Value
Environmental compartment		
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified	
Secondary poisoning		9,33 mg/kg
91648-65-6	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol	
Freshwater		0,041 mg/l
Freshwater (intermittent releases)		0,41 mg/l
Marine water		0,004 mg/l
Freshwater sediment		380,62 mg/kg
Marine sediment		38,06 mg/kg
Secondary poisoning		6,67 mg/kg
Micro-organisms in sewage treatment plants (STP)		8000 mg/l
Soil		308,96 mg/kg

#### Additional advice on limit values

To date, no national critical limit values exist.

#### 8.2. Exposure controls



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#### Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

#### Protective and hygiene measures

Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and after work.

When using do not eat, drink, smoke, sniff.

#### Eye/face protection

During filling, metering, mixing and sampling must be used:

Wear eye/face protection. DIN EN 166

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Recommended glove articles: EN ISO 374

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,4 mm

Breakthrough times and swelling properties of the material must be taken into consideration. Breakthrough time: > 8h

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	braun
Odour:	characteristic
Odour threshold:	not determined

#### Test method

pH-Value:	not determined
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#### Changes in the physical state

Melting point:	not determined
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Boiling point or initial boiling point and	not determined
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boiling range:

Pour point:	-30 °C	ISO 3016
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Flash point:	210 °C	DIN ISO 2592
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#### Flammability

Solid/liquid:	not applicable
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Gas:	not applicable
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#### Explosive properties

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits:	0,6 vol. %
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Upper explosion limits: 6,5 vol. %

#### **Self-ignition temperature**

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

#### **Oxidizing properties**

The product is not: oxidising.

Vapour pressure: not determined

Density (at 15 °C): 0,889 g/cm<sup>3</sup>

Water solubility: not determined

#### **Solubility in other solvents**

not determined

Partition coefficient n-octanol/water: not determined

Viscosity / dynamic: not determined

Viscosity / kinematic:  
(at 40 °C) 137 mm<sup>2</sup>/s

Relative vapour density: not determined

Evaporation rate: not determined

#### **9.2. Other information**

Solid content: not determined

### SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

#### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### **10.3. Possibility of hazardous reactions**

The formation of combustible vapours is possible at temperatures above: Flash point

#### **10.4. Conditions to avoid**

Avoid: Thermal decomposition

#### **10.5. Incompatible materials**

Materials to avoid:

- Oxidising agent

#### **10.6. Hazardous decomposition products**

Hazardous combustion products:

- Carbon monoxide (CO)
- Carbon dioxide (CO<sub>2</sub>)
- Nitrogen oxides (NO<sub>x</sub>)
- Pyrolysis products, toxic

### SECTION 11: Toxicological information

#### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

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#### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 > 5000 mg/kg	Rabbit	Study report (1982)	OECD Guideline 402
	Alkylamine trialkyldithiophosphate				
	oral	ATE 500 mg/kg			
91648-65-6	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol				
	oral	LD50 > 10000 mg/kg	Rat	Study report (1981)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1981)	OECD Guideline 402
	inhalation (4 h) vapour	LC50 > 2,75 mg/l	Rat	Study report (1981)	OECD Guideline 403

#### Irritation and corrosivity

Based on available data, the classification criteria are not met.

#### Sensitising effects

Contains Alkylamine trialkyldithiophosphate. May produce an allergic reaction.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

The product contains less than 3% DMSO extract (method IP346). A classification as a carcinogen with R45 is deleted. (Note L)

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

#### 11.2. Information on other hazards

##### Endocrine disrupting properties

No information available.

### SECTION 12: Ecological information

#### 12.1. Toxicity

The product spreads out on the surface of the water. A small fraction of the constituents will be dissolved. It prevents the solution of oxygen and can cause the death of water organism.



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified					
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)
91648-65-6	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol					
	Acute fish toxicity	LL50 mg/l	> 1000	96 h	Pimephales promelas	Study report (1985)
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	Study report (2012)
	Acute crustacea toxicity	EL50 mg/l	< 100	48 h	Daphnia magna	Study report (2005)

#### **12.2. Persistence and degradability**

Not readily biodegradable (according to OECD criteria)

#### **12.3. Bioaccumulative potential**

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

#### **BCF**

CAS No	Chemical name	BCF	Species	Source
91648-65-6	1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol	15,7	Fish, not further specified.	Study report (2013)

#### **12.4. Mobility in soil**

The product has not been tested.

#### **12.5. Results of PBT and vPvB assessment**

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### **12.6. Endocrine disrupting properties**

No information available.

#### **12.7. Other adverse effects**

No information available.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### **SECTION 14: Transport information**

#### **Land transport (ADR/RID)**

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<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### Air transport (ICAO-TI/IATA-DGR)

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### **14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

#### **14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

#### **14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

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

##### **EU regulatory information**

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

##### **National regulatory information**

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	2 - obviously hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

#### **15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### **Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,12,15,16.

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#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
VOC: Volatile Organic Compounds  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

#### Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Alkylamine trialkyldithiophosphate. May produce an allergic reaction.

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#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*