Safety Data Sheet

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

1.1. Product identifier

ASTRON Maxima Energy TSi 5W-30

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

Use of the substance/mixture

Motor oil multigrade

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

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

EUH208 Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
148520-84-7	Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, calcium salts			0 - < = 0,61 %
	800-941-4			
	Skin Sens. 1B; H317			
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts			0 - < 0,19 %
	274-263-7		01-2119492616-28	
	Skin Sens. 1B; H317			
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased			0 - < 0,19 %
	701-251-5			
	Repr. 1B, Aquatic Chronic 4; H360 H413			

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		
148520-84-7	800-941-4	Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, calcium salts	0 - < = 0,61 %
	Skin Sens. 1B; H317: >= 10 - 100		
	701-251-5	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	0 - < 0,19 %
	dermal: LD50 = > 4000 mg/kg; oral: LD50 = > 5000 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.
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 drunken 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.

- Water spray jet
- alcohol resistant foam
- Carbon dioxide (CO2).
- Extinguishing powder

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. 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 (CO2).
- Nitrogen oxides (NOx)
- 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 advice

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.
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

Further information on storage conditions

Note Regulation on facilities for the storage, filling and handling water-polluting substances. ..

7.3. Specific end use(s)

Motor oil multigrade

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts			
Consumer , long-term		inhalation	systemic	11,75 mg/m³
Worker , long-term		dermal	systemic	3,33 mg/kg bw/day
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased			
Consumer DNEL, acute		oral	systemic	50 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	3,5 mg/m³
Worker DNEL, acute		inhalation	systemic	133,6 mg/m³
Worker DNEL, long-term		dermal	systemic	8,33 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	80 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m³
Consumer DNEL, acute		inhalation	systemic	0,067 mg/m³
Consumer DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	40 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,25 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	
Freshwater		1 mg/l
Freshwater (intermittent releases)		10 mg/l
Marine water		1 mg/kg
Secondary poisoning		16,667 mg/kg
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	
Freshwater		0,5 mg/l
Freshwater (intermittent releases)		5 mg/l
Marine water		0,05 mg/l
Freshwater sediment		1650 mg/kg
Marine sediment		165 mg/kg
Secondary poisoning		11,11 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		1340 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls


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. 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:	yellow brown
Odour:	characteristic
Odour threshold:	not determined

pH-Value:	not determined

Changes in the physical state

Melting point/freezing point:	-39 °C
Boiling point or initial boiling point and boiling range:	not determined
Pour point:	not determined
Flash point:	230 °C

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined

Oxidizing properties

The product is not: oxidising.

Vapour pressure:	not determined
Density (at 15 °C):	0,856 g/cm³
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic: (at 40 °C)	72,85 mm²/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

Conditions to avoid: Thermal decomposition

10.5. Incompatible materials

Materials to avoid:

- Oxidising agent, strong

10.6. Hazardous decomposition products

Hazardous combustion products:

- Carbon monoxide (CO)
- Carbon dioxide (CO2).
- Nitrogen oxides (NOx)
- Pyrolysis products, toxic

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1986)	OECD Guideline 401
	dermal	LD50 mg/kg	> 4000	Rabbit	Study report (1986)	OECD Guideline 402

Irritation and corrosivity

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

Sensitising effects

Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. 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 not hazardous according to regulation (EC) No 1272/2008 [CLP].

11.2. Information on other hazards

Endocrine disrupting properties

See section: 12.6

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased						
	Acute fish toxicity	LL50 mg/l	> 1000	96 h	Pimephales promelas	Study report (1993)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 500	96 h	Pseudokirchneriella subcapitata	Study report (1994)	OECD Guideline 201
	Acute crustacea toxicity	EL50 mg/l	> 1000	48 h	Daphnia magna	Study report (1993)	OECD Guideline 202
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	3 h	activated sludge, domestic	Study report (1994)	OECD Guideline 209

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	ca. 9,3

BCF

CAS No	Chemical name	BCF	Species	Source
	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	2,2	lipid triolein	Tribology – Solving

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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)

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

Inland waterways transport (ADN)

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

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: 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

Restrictions on use (REACH, annex XVII):

Entry 75

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

National regulatory information

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): 1,2,3,4,5,6,7,8,9,10,11,12,13,15,16.

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
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Relevant H and EUH statements (number and full text)

H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. May produce an allergic reaction.

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.

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