Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 Reviewed on 03/12/2024

1 Identification

· **Product identifier**

· **Trade name: FORMULA 4T SAE 10W/50 MA2**

· **Application of the substance / the mixture**
Engine oil
Only for proper handling.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**

MOTOREX AG
Bern–Zürich–Strasse 31, Postfach
CH–4901 Langenthal
Tel. +41 (0)62 919 75 75
www.motorex.com

· **Information department:** msds@motorex.com
· **Emergency telephone number:**
USA + Kanada: 1 800 424 9300 (Chemtrec Chemical Manufacturers Association, Arlington, VA 22209)

2 Hazard(s) identification

· **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *0
Fire = 1
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**		
Mineral oils (mixture)	Aspiration Hazard 1, H304	≥1-≤7.5%

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 Reviewed on 03/12/2024

Trade name: FORMULA 4T SAE 10W/50 MA2

(Contd. of page 1)

· **Additional information:**
Note L: The classification as carcinogen does not apply because the mixture (or substance) contains less than 3% dimethyl sulfoxide extract (DMSO), measured according to IP 346.

4 First-aid measures

· **Description of first aid measures**
· **General information:** No special measures required.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** If symptoms persist consult doctor.
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
122-39-4	diphenylamine	30 mg/m³

· **PAC-2:**		
122-39-4	diphenylamine	180 mg/m³

· **PAC-3:**		
122-39-4	diphenylamine	220 mg/m³

· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Precautions for safe handling** No special measures required.
· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 Reviewed on 03/12/2024

Trade name: FORMULA 4T SAE 10W/50 MA2

(Contd. of page 2)

· **Further information about storage conditions:**
The recommended storage temperature is (deg.C): ≤50°C
· **Storage class:** 10
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Additional information about design of technical systems:** No further data; see section 7.
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
· **Breathing equipment:**
Not necessary if room is well-ventilated.
Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.
· **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Goggles recommended during refilling.
· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**
· **General Information**

· **Color:**	Yellow-brown
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **Melting point/Melting range:**	Undetermined.
· **Boiling point/Boiling range:**	Undetermined.
· **Flammability (solid, gaseous):**	Not applicable.
· **Explosion limits:**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Flash point:**	>220 °C (>428 °F)
· **Decomposition temperature:**	Not determined.
· **pH-value:**	Not determined.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 Reviewed on 03/12/2024

Trade name: FORMULA 4T SAE 10W/50 MA2

(Contd. of page 3)

· **Viscosity:**	
· **Kinematic:**	130 mm²/s @ 40 °C (266 mm²/s @ 104 °F)
· **Consistency**	
· **Dynamic:**	Not determined.
· **Solubility in / Miscibility with**	
· **Water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Vapor pressure:**	Not determined.
· **Vapor pressure:**	
· **Density at 20 °C (68 °F):**	0.86 g/cm³ (7.177 lbs/gal) (ASTM D 4052)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.

· **Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Solvent separation test**	
· **VOC content:**	0.00 %
· **Change in condition**	
· **Evaporation rate**	Not determined.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:** Based on available data, the classification criteria are not met.
· **on the skin:** Based on available data, the classification criteria are not met.
· **on the eye:** Based on available data, the classification criteria are not met.
· **Sensitization:** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **Specific target organ toxicity - single exposure**
Based on available data, the classification criteria are not met.
· **Specific target organ toxicity - 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 toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
122-39-4	diphenylamine	2B

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 Reviewed on 03/12/2024

Trade name: FORMULA 4T SAE 10W/50 MA2

(Contd. of page 4)

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects**
· **Additional ecological information:**
· **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.
Return product and/or partially emptied container in original packaging to the point of sale or hand it over to a collection point for special waste.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number** · **DOT, ADR/RID/ADN, IMDG, IATA**	Void
· **UN proper shipping name** · **DOT, ADR/RID/ADN, IMDG, IATA**	Void
· **Transport hazard class(es)** · **DOT, ADR/RID/ADN, ADN, IMDG, IATA** · **Class**	Void
· **Packing group** · **DOT, ADR/RID/ADN, IMDG, IATA**	Void
· **Environmental hazards:**	Not applicable.
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 Reviewed on 03/12/2024

Trade name: FORMULA 4T SAE 10W/50 MA2

(Contd. of page 5)

· **UN "Model Regulation":** Void

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

122-39-4	diphenylamine

· **TSCA (Toxic Substances Control Act):**

64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic	ACTIVE
2215-35-2	Zink-O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(dithiophosphat)	ACTIVE
84605-29-8	Phosphorodithioic acid, mixed O,O-bis (1,3-diethylbutyl and iso-Pr)esters, zinc salts	ACTIVE
8042-47-5	White mineral oil (petroleum)	ACTIVE
122-39-4	diphenylamine	ACTIVE

· **Hazardous Air Pollutants**
None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

122-39-4	diphenylamine	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.
No special training instructions to ensure protection of human health and environment are required.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/25/2024 *Reviewed on 03/12/2024*

Trade name: FORMULA 4T SAE 10W/50 MA2

(Contd. of page 6)

· **Department issuing SDS:** Abteilung Produktsicherheit
· **Date of preparation / last revision** 03/25/2024
· **Abbreviations and acronyms:**
Aspiration Hazard 1: Aspiration hazard – Category 1