

1 Identification

- **Product identifier**
- **Trade name:** **BOXER 4T SAE 5W/40 JASO MA2**
- **Application of the substance / the mixture**
Only for proper handling.
Engine oil
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

BUCHER AG LANGENTHAL
MOTOREX-Schmiertechnik
Bern-Zürich-Strasse 31
CH-4901 Langenthal
Telefon +41 (0)62 919 75 75

Lube-Tech
Lubrication Technologies, Inc.
900 Mendelssohn Avenue North
US-55427 Golden Valley, Minnesota
Phone: 001 763 417 1357
- **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	Health = *0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 1)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 72623-87-1 EINECS: 276-738-4 Index number: 649-483-00-5	Lubricating oils (petroleum), C20-50, hydro-treated neutral oil-based Asp. Tox. 1, H304	25-50%
	Mineral oils (mixture) Asp. Tox. 1, H304	≥1-≤7.5%

- **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:**

Remove residues with soap and water.

Remove contaminated clothing immediately.

- **After eye contact:**

Rinse opened eye for several minutes under running water.

Consult a physician if irritation develops.

- **After swallowing:**

Do not induce vomiting. Do not take in resorption stimulating agents.

Consult a physician who will decide on need and method of emptying the stomach.

- **Information for 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).

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 2)

- **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.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

1330-20-7	xylene	130 ppm
100-41-4	ethylbenzene	33 ppm

- **PAC-2:**

1330-20-7	xylene	920* ppm
100-41-4	ethylbenzene	1100* ppm

- **PAC-3:**

1330-20-7	xylene	2500* ppm
100-41-4	ethylbenzene	1800* ppm

7 Handling and storage

- **Handling:**
- **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.
- **Further information about storage conditions:** None.
- **Storage class:** 10
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:**
No further data; see section 7.
- **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**
- **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.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 3)

· **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**

Protective gloves to EN374, resistant to oil in use. Standard EN 374 Level 3 control G1

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.

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· **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.

For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 1).

· **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**

· **Appearance:**

Form:

Fluid

Color:

Brown

· **Odor:**

Characteristic

· **Odor threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

Undetermined.

· **Flash point:**

>200 °C (>392 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:**

Lower:

Not determined.

Upper:

Not determined.

· **Vapor pressure:**

Not determined.

· **Density at 20 °C (68 °F):**

0.849 g/cm³ (7.085 lbs/gal) (ASTM D 4052)

· **Relative density**

Not determined.

· **Vapor density**

Not determined.

· **Evaporation rate**

Not determined.

· **Solubility in / Miscibility with**

Water:

Not miscible or difficult to mix.

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 4)

- | | |
|---|--|
| · Partition coefficient (n-octanol/water): Not determined. | |
| · Viscosity: | |
| · Dynamic: | Not determined. |
| · Kinematic: | 88.2 mm ² /s @ 40 °C (190.8 °F) |
| · VOC content: | 0.00 % |
| · Solids content: | 0.0 % |
| · Other information No further relevant information available. | |

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:**

- **LD/LC50 values that are relevant for classification:**

72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Oral	LD50	5,000 mg/kg (rat)
	LOAEL	125 mg/kg/24h (rat)
Dermal	LD50	2,000-5,000 mg/kg (rabbit)
	NOAEL	150 mg/kg/24h (mouse)
		30-2,000 mg/kg/24h (rat)
		1,000 mg/kg/24h (rabbit)
	LOAEL	100 mg/kg/24h (mouse)
Inhalative	LC50 / 4h	2.18-5.53 mg/l (rat)
	NOAEC	980 mg/m ³ (rat)
	NOEC	220 mg/m ³ (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

1330-20-7 xylene

3

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 5)

100-41-4 ethylbenzene

2B

· **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:****72623-87-1 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based**

LL50 10,000 mg/l/96h (aquatic invertebrates)
100 mg/l/96h (fish)

LL50 10,000 mg/l/72h (aquatic invertebrates)

LL50 10,000 mg/l/48h (aquatic invertebrates)

LL50 10,000 mg/l/24h (aquatic invertebrates)

EL50 10,000 mg/l/48h (aquatic invertebrates)

· **Persistence and degradability** No further relevant information available.· **Behavior in environmental systems:**· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

Water hazard class 1 (according to Appendix 1 AwSV): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **Other adverse effects** No further relevant information available.

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.

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

14 Transport information

· **UN-Number**· **DOT, ADR/RID/ADN, ADN, IMDG, IATA** Void· **UN proper shipping name**· **DOT, ADR/RID/ADN, ADN, IMDG, IATA** Void

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 6)

- | | |
|--|-----------------|
| · Transport hazard class(es) | |
| · DOT, ADR/RID/ADN, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | |
| | Not applicable. |
| · UN "Model Regulation": | Void |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):
--

None of the ingredients is listed.

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

122-39-4	diphenylamine
----------	---------------

1330-20-7	xylene
-----------	--------

100-41-4	ethylbenzene
----------	--------------

· TSCA (Toxic Substances Control Act):

84605-29-8	Phosphorodithioic acid, mixed O,O-bis (1,3-diethylbutyl and iso-Pr)esters, zinc salts
------------	---

8042-47-5	White mineral oil, petroleum
-----------	------------------------------

122-39-4	diphenylamine
----------	---------------

1330-20-7	xylene
-----------	--------

92257-31-3	2-Naphthalenol, 1-((4-(phenylazo)phenyl)azo)-, ar-heptylar, ar, Methyl derivative
------------	---

100-41-4	ethylbenzene
----------	--------------

104-75-6	2-ethylhexylamine
----------	-------------------

· TSCA new (21st Century Act) (Substances not listed)
--

72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
------------	--

	Mineral oils (mixture)
--	------------------------

· Proposition 65

· Chemicals known to cause cancer:

100-41-4	ethylbenzene
----------	--------------

· 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.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/18/2018

Reviewed on 11/12/2018

Trade name: **BOXER 4T SAE 5W/40 JASO MA2**

(Contd. of page 7)

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

1330-20-7	xylene	I
100-41-4	ethylbenzene	D

· **TLV (Threshold Limit Value established by ACGIH)**

122-39-4	diphenylamine	A4
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not 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.

· **Department issuing SDS:** Abteilung Produktsicherheit

· **Date of preparation / last revision** 12/18/2018 / 1.1

· **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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Asp. Tox. 1: Aspiration hazard – Category 1

US