

Printing date 11/16/2018

Reviewed on 11/16/2018

1 Identification

· **Product identifier**

· **Trade name:** POWER SYNT 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**

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Acute 3 H402 Harmful to aquatic life.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Ca long-chain alkaryl sulfonate

· **Hazard statements**

H317 May cause an allergic skin reaction.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P272 Contaminated work clothing must not be allowed out of the workplace.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 1)

- P273 Avoid release to the environment.
 P280 Wear protective gloves.
 P302+P352 If on skin: Wash with plenty of water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P321 Specific treatment (see on this label).
 P363 Wash contaminated clothing before reuse.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
 Fire = 1
 Reactivity = 0

- **HMS-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:**

| | | |
|------------------------------------|---|-----------|
| Polymer | Ca long-chain alkaryl sulfonate | ≥0.25-<1% |
| | Skin Sens. 1, H317 | |
| CAS: 128-39-2 EINECS: 204-884-0 | 2,6-di-tert-butylphenol | ≥0.25-<1% |
| | Skin Corr. 1A, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | |

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
 Supply fresh air and to be sure call for a doctor.
 In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
 Remove contaminated clothing immediately.
 Remove residues with soap and water.
 Immediately wash with water and soap and rinse thoroughly.
- **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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 2)

- **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**
In case of fire carbon, sulphur and nitrogen oxides can be formed.
- **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 product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
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).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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:

| | | |
|---------|--------|--------|
| 98-82-8 | cumene | 50 ppm |
|---------|--------|--------|

· PAC-2:

| | | |
|---------|--------|---------|
| 98-82-8 | cumene | 300 ppm |
|---------|--------|---------|

· PAC-3:

| | | |
|---------|--------|---------|
| 98-82-8 | cumene | 730 ppm |
|---------|--------|---------|

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Used oils (motor oils, gear oils, industrial oils) contain components causing skin cancer.
Therefore, avoid skin contact by wearing protecting gloves. Carefully clean soiled parts of the skin with soap.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Do not heat above flash point.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 3)

- **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:**
Store containers closed and protect against rain, dust, heat and other atmospheric influences.
- **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 item 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.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
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:**



Protective gloves

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).

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 4)

- **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):** 0.858 g/cm³ (7.16 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.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

| | |
|--------------|---|
| Dynamic: | Not determined. |
| Kinematic: | 87.5 mm ² /s @ 40 °C (DIN 51562-1) |
| VOC content: | 0.00 % |
| | 0.0 g/l / 0.00 lb/gal |

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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 5)

- **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:**

128-39-2 2,6-di-tert-butylphenol

| | | |
|------|-------|---------------------|
| Oral | LD50 | 5,000 mg/kg (rat) |
| | NOEL | 15 mg/kg/24h (rat) |
| | NOAEL | 100 mg/kg/24h (rat) |

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

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

| | | |
|----------|--------------|----|
| 100-41-4 | ethylbenzene | 2B |
| 98-82-8 | cumene | 2B |

- **NTP (National Toxicology Program)**

| | | |
|---------|--------|---|
| 98-82-8 | cumene | R |
|---------|--------|---|

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

128-39-2 2,6-di-tert-butylphenol

| | |
|------|--|
| LC50 | 1.4 mg/l/96h (fish) |
| LC50 | 0.23 mg/l/21d (aquatic invertebrates) |
| LC50 | 0.45 mg/l/48h (aquatic invertebrates) |
| LC50 | 1 mg/l/14d (fish) |
| LC50 | 1.1 mg/l/7d (fish) |
| LC50 | 0.59 mg/l/24h (aquatic invertebrates) |
| EC50 | 1.7-2.3 mg/l/24h (algae / cyanobacteria) |
| EC50 | 1.2-3.9 mg/l/96h (algae / cyanobacteria) |
| EC50 | 1.4-3.6 mg/l/72h (algae / cyanobacteria) |
| EC50 | 0.14 mg/l/21d (aquatic invertebrates) |

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 6)

| | |
|------|---|
| EC50 | 1.7-3.5 mg/l/48h (algae / cyanobacteria) |
| NOEC | 0.035 mg/l/21d (aquatic invertebrates) |
| NOEC | 0.64-2.1 mg/l/96h (algae / cyanobacteria) |
| NOEC | 0.3 mg/l/14d (fish) |
| LOEC | 0.086 mg/l/72h (aquatic invertebrates) |

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential**

128-39-2 2,6-di-tert-butylphenol

| | |
|--------------------------|---|
| Partition coefficient | 4.48-4.92 [---] (log Kow) (Bioaccumulation) |
| Biologische Abbaubarkeit | <50 % (28d) (Biodegradability) (BIOWIN v4.10) |

· **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **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.

Harmful to aquatic organisms

· **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 |
| · Transport hazard class(es) | |
| · DOT, ADR/RID/ADN, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Void |

(Contd. on page 8)

- US -

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

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

(Contd. of page 7)

| | |
|--|-----------------|
| · 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):**

100-41-4 ethylbenzene

98-82-8 cumene

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

151006-63-2 1-Dodecene, homopolymer, hydrogenated

26401-35-4 DTDA

36878-20-3 Reaction products of Benzeneamine, N-phenyl- with nonene (branched)

8042-47-5 White mineral oil, petroleum

98-82-8 cumene

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

Ca long-chain alkaryl sulfonate

128-39-2 2,6-di-tert-butylphenol

· **Proposition 65**

· **Chemicals known to cause cancer:**

98-82-8 cumene

· **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)**

100-41-4 ethylbenzene

D

98-82-8 cumene

D, CBD

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

100-41-4 ethylbenzene

A3

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

None of the ingredients is listed.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/16/2018

Reviewed on 11/16/2018

Trade name: POWER SYNT 4T SAE 5W/40 JASO MA2

(Contd. of page 8)

· **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** 11/16/2018 / 1.0

· **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

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

— US —