

Page 1 of 8
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 19.01.2011 / 0006
Replaces revision of / Version: 07.10.2008 / 0005
Valid from: 19.01.2011
PDF print date: 19.02.2011
Top Tec 4100 5W40 5l Art.: 3701

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

**Top Tec 4100 5W40 5l
Art.: 3701**

1.2 Relevant identified uses of the substance or mixture:

Motor oil

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Straße 4, D-89081 Ulm-Lehr
Telephone (+49) 0731-1420-0, Fax (+49) 0731-1420-88

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

1.4 Emergency telephone

Advisory office in case of poisoning:

Tel.:

Telephone number of the company in case of emergencies:

Tel.: (+49) 0731-1420-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).

The mixture is not classified as dangerous in the terms of the directive 1999/45/EC.

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments).

Symbols: Not applicable

Indications of danger: ---

R-phrases:

S-phrases:

Additions:

Safety data sheet available for professional user on request.

2.3 Other hazards

The mixture contains no vPvB substance (vPvB = very persistent, very bioaccumulative).

The mixture contains no PBT substance (PBT = persistent, bioaccumulative, toxic).

Product can compose a film on the water surface, which can prevent oxygen exchange.

Page 2 of 8
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revised on / Version: 19.01.2011 / 0006
 Replaces revision of / Version: 07.10.2008 / 0005
 Valid from: 19.01.2011
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 Top Tec 4100 5W40 5l Art.: 3701

Hydrocarbons can be harmful to water.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

Calcium long-chain alkylaryl salicylate polymers	
Registration number (ECHA)	-
Index	---
EINECS, ELINCS	-
CAS	CAS n.v.
content %	1-5
Symbol	---
R-phrases	52-53
Classification categories / Indications of danger	Dangerous for the environment
Hazard class/Hazard category	Hazard statement
Aquatic Chronic/3	H412

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.
 Keep Data Sheet available.

Ingestion

Rinse the mouth thoroughly with water.
 Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Where relevant delayed occurring symptoms and effects will be found in section 11. or at the exposure routes under section 4.1.

The following may occur:

Irritation of the eyes

With long-term contact:

Drying of the skin.

Irritation of the skin.

With oil mist formation:

Irritation of the respiratory tract

Ingestion:

Nausea

Gastrointestinal disturbances

Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2

Page 3 of 8
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 19.01.2011 / 0006
Replaces revision of / Version: 07.10.2008 / 0005
Valid from: 19.01.2011
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Top Tec 4100 5W40 5l Art.: 3701

Foam
Dry extinguisher
Cool container at risk with water.

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Hydrogen sulphide
Oxides of carbon
Oxides of nitrogen
Oxides of sulphur
Toxic pyrolysis products.
Hot product gives off combustible vapours.

5.3 Advice for firefighters

Protective respirator with independent air supply.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping
Do not carry cleaning cloths soaked in product in trouser pockets.

6.2 Environmental precautions

If leakage occurs, dam up.
Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

Ensure good ventilation.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Take measures against electrostatic charging, if appropriate.
Do not heat to temperatures close to flash point.
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Protect against moisture and store closed.
Protect from direct sunlight and warming.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Page 4 of 8
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revised on / Version: 19.01.2011 / 0006
 Replaces revision of / Version: 07.10.2008 / 0005
 Valid from: 19.01.2011
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 Top Tec 4100 5W40 5l Art.: 3701

WEL-TWA: 5 mg/m3 (ACGIH)	WEL-STEL: 10 mg/m3 (ACGIH)	---
BMGV: ---	Other information: ---	

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
 Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

Skin protection - Hand protection:
 Protective gloves, oil resistant (EN 374)
 Recommended
 Protective nitrile gloves (EN 374)
 Protective Neopren gloves (EN 374).
 Protective hand cream recommended.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:
 Normally not necessary.
 With oil mist formation:
 Filter A P 3 (EN 14387), code colour brown, white

Thermal hazards:
 If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Brown
Odour:	Characteristic

Page 5 of 8
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revised on / Version: 19.01.2011 / 0006
 Replaces revision of / Version: 07.10.2008 / 0005
 Valid from: 19.01.2011
 PDF print date: 19.02.2011
 Top Tec 4100 5W40 5l Art.: 3701

Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	-36 °C
Initial boiling point and boiling range:	Not determined
Flash point:	215 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,855 g/ml
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	85 mm ² /s (40°C)
Viscosity:	14 mm ² /s (100°C)
Explosive properties:	Not determined
Oxidising properties:	Not determined

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

See also Subsection 10.4 to 10.6.
 The product has not been tested.

10.2 Chemical stability

See also Subsection 10.4 to 10.6.
 Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

See also Subsection 10.4 to 10.6.
 No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.
 Protect from humidity.
 Heating, open flame, ignition sources

10.5 Incompatible materials

See also section 7.
 Avoid contact with strong oxidizing agents.
 Avoid contact with strong acids.

10.6 Hazardous decomposition products

See also Subsection 10.4 to 10.6.
 See also section 5.3
 No decomposition when used as directed.

SECTION 11: Toxicological information

No classification according to calculation procedure.

Top Tec 4100 5W40 5l
 Art.: 3701

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
	t					

Page 6 of 8
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 19.01.2011 / 0006
Replaces revision of / Version: 07.10.2008 / 0005
Valid from: 19.01.2011
PDF print date: 19.02.2011
Top Tec 4100 5W40 5I Art.: 3701

Acute toxicity, by oral route:				---		n.d.a.
Acute toxicity, by dermal route:				---		n.d.a.
Acute toxicity, by inhalation:				---		n.d.a.
Skin corrosion/irritation:				---		n.d.a.
Serious eye damage/irritation:				---		n.d.a.
Respiratory or skin sensitisation:				---		n.d.a.
Germ cell mutagenicity:				---		n.d.a.
Carcinogenicity:				---		n.d.a.
Reproductive toxicity:				---		n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):				---		n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):				---		n.d.a.
Aspiration hazard:				---		n.d.a.
Respiratory tract irritation:				---		n.d.a.
Repeated dose toxicity:				---		n.d.a.
Symptoms:				---		n.d.a.

Calcium long-chain alkylaryl salicylate polymers						
Toxicity/effect	Endpoint t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:				---		n.d.a.
Acute toxicity, by dermal route:				---		n.d.a.
Acute toxicity, by inhalation:				---		n.d.a.
Skin corrosion/irritation:				---		n.d.a.
Serious eye damage/irritation:				---		n.d.a.
Respiratory or skin sensitisation:				---		n.d.a.
Germ cell mutagenicity:				---		n.d.a.
Carcinogenicity:				---		n.d.a.
Reproductive toxicity:				---		n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):				---		n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):				---		n.d.a.
Aspiration hazard:				---		n.d.a.
Respiratory tract irritation:				---		n.d.a.
Repeated dose toxicity:				---		n.d.a.
Symptoms:				---		n.d.a.

SECTION 12: Ecological information

Persistence and degradability:
Not readily biodegradable
(Particulars of main substances contained)
(Particulars of main substances contained)

Top Tec 4100 5W40 5I Art.: 3701							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							Concentration in organisms possible.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

Page 7 of 8
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 19.01.2011 / 0006
Replaces revision of / Version: 07.10.2008 / 0005
Valid from: 19.01.2011
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Top Tec 4100 5W40 5l Art.: 3701

Calcium long-chain alkylaryl salicylate polymers							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.
EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)
13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

UN number: n.a.

Transport by road/by rail (ADR/RID)

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Classification code: n.a.

LQ (ADR 2011): n.a.

LQ (ADR 2009): n.a.

Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Marine Pollutant: n.a.

Environmental hazards: Not applicable

Transport by air (IATA)

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Page 8 of 8
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 19.01.2011 / 0006
Replaces revision of / Version: 07.10.2008 / 0005
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Top Tec 4100 5W40 5I Art.: 3701

Environmental hazards: Not applicable

Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

Additional information:

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions: n.a.

15.2 Chemical safety assessment

No information available at present.

SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: n.a.

The following statements are the indicated R-phrases / H-phrases and classification codes (GHS/CLP) for the ingredients (listed in Section 3).

52 Harmful to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

H412 Harmful to aquatic life with long lasting effects.

Aquatic Chronic-Hazardous to the aquatic environment - chronic

Legend:

n.a. = not applicable / n.v., k.D.v. = n.av. = not available / n.g. = n.c. = not checked

WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference period), STEL = Short-term exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40

AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

VOC = Volatile organic compounds

AOX = Adsorbable organic halogen compounds

ATE = Acute Toxicity Estimates according to Regulation (EC) 1272/2008 (CLP)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

Chemical Check GmbH, Wöbbeler Straße 2-4, D-32839 Steinheim, Tel.: +49 5233 94 17 0, +49 1805-CHEMICAL / +49 180 52 43 642, Fax: +49 5233 94 17 90, +49 180 50 50 455

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