RAVENOL Selfmix 2T

SPEZIFIKATIONEN API TB IISO-L-EGB INMMA TC-W
HERSTELLUNGSART MINERALISCH
FREIGABE JASO FB (049RAV155)
EMPFEHLUNGEN HUSQVARNA I STIHL I PARTNER I MCCULLOCH I JONSERED I OLEO-MAC I POULAN I MARUYAMA I DOLMAR I OREGON I MAKITA I RYOBI I HITACHI

ART.-NR. 1153100

100 ml I 1153100-100
4 L I 1153100-004
10 L I 1153100-010
20 L I 1153100-020
20 L I 1153100-B20
1000 L I 1153100-700

RAVENOL Selfmix 2T ist ein vorgemischter mineralischer Schmierstoff (mit einer Trägerflüssigkeit für die selbstmischenden Eigenschaften), der den hohen Anforderungen des modernen Zweitaktmotors gerecht wird. Er verhindert sehr wirksam die Ansammlung von Verkokungen in den Kolbenringnuten, den Verbrennungsräumungen und den Auslassschlitzen. Verschmutzungen von Zündkerzen und Rostschäden an den Treibwerksteilen werden vermieden.

Anwendungshinweis

RAVENOL Selfmix 2T ist ein speziell für Zeitakt-Krafträder entwickeltes Universaloel, das für Getrenntschmierungs- und Selbstmischsysteme konzipiert ist. Bei dem Einsatz in Getrenntschmierungs-systemen wird mit diesem Produkt eine optimale Schmierung gewährleistet und die Rauchbildung umweltfreundlich minimiert.

RAVENOL Selfmix 2T eignet sich sowohl für luftgekühlte als auch für wassergekühlte Zweitakt-Ottomotoren, z.B. Rasenmäher, Krafträder, Mopeds, Mofas, Kettensägen usw.

Mischtabelle für RAVENOL Selfmix 2T:

Empfohlenes Mischungsverhältnis max. 1:50. Herstellervorschriften beachten.

Der Inhalt einer 1000ml-Dose ist wie folgt einzusetzen:

15 Liter Kraftstoff = 1 : 15	30 Liter Kraftstoff = 1 : 30
20 Liter Kraftstoff = 1 : 20	40 Liter Kraftstoff = 1 : 40
25 Liter Kraftstoff = 1 : 25	50 Liter Kraftstoff = 1 : 50

Eigenschaften

RAVENOL Selfmix 2T bietet:

- Hervorragender Korrosionsschutz
- Ausgezeichnete Oxidationsstabilität
- Hoher Verschleißschutz
- Umweltfreundlich durch geringe Rauchentwicklung
- Geringe Verkokungsneigung
- Universell einsetzbar.

- Sofortige, homogene Mischung mit dem verwendeten Kraftstoff (auch bleifrei)

Eigenschaften	Einheit	Daten	Prüfung nach
Dichte bei 20°C	kg/m³	882	EN ISO 12185
Farbe		rot	visuell
Viskosität bei 100°C	mm²/s	8,7	DIN 51 562
Viskosität bei 40°C	mm²/s	70,0	DIN 51 562
Viskositätsindex VI		100	DIN ISO 2909
Pourpoint	°C	-24	DIN ISO 3016
Flammpunkt (COC)	°C	190	DIN ISO 2592

Alle Angaben entsprechen nach bestem Wissen dem derzeitigen Stand der Erkenntisse und unserer Entwicklung. Änderungen bleiben vorbehalten. Alle Bezugnahme auf DIN-Normen dienen nur der Warenbeschreibung und stellen keine Garantie dar. Bei vorliegenden Problemfällen technische Beratung anfordern.

Stand: 16. März 2021

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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

1.1. Product identifier

Trade name/designation:

RAVENOL Selfmix 2T

Article No.:
1153100

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

Use of the substance/mixture:
Lubricant

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Ravensberger Schmierstoffvertrieb GmbH
Jöllenbecker Str. 2
33824 Werther
D
Telephone: +49 5203 9719 0
Telefax: +49 5203 9719 48
E-mail: kontakt@ravenol.de
Website: www.ravenol.de
E-mail (competent person): kontakt@ravenol.de

1.4. Emergency telephone number

Abt. Produktsicherheit, 24h: +49 700 24 112 112 (Company ID: RAV) (outside USA/Canada) 011 49 700 24 112 112 (Company ID: RAV) (inside USA/Canada), +49 5203 9719 0 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Hazard components for labelling:
Distillates (petroleum), heavy hydrocracked; Calcium, C10-14-branched alkyl-2,3(or 3,4)-dimethylbenzenesulfonate C15-36-branched alkylmethylbenzenesulfonate complexes

Hazard statements: -

Supplemental Hazard information (EU)	
EUH208	Contains Calcium, C10-14-branched alkyl-2,3(or 3,4)-dimethylbenzenesulfonate C15-36-branched alkylmethylbenzenesulfonate complexes. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Precautionary statements: -

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen-tration
CAS No.: 64741-76-0 **EC No.:** 265-077-7 **REACH No.:** 01-2119486951-26	**Distillates (petroleum), heavy hydrocracked** Asp. Tox. 1 **Danger** H304	5 – 15 Wt %
CAS No.: 90268-86-3 **EC No.:** 290-891-4	**Calcium, C10-14-branched alkyl-2,3(or 3,4)-dimethylbenzene sulfonate C15-36-branched alkylmethylbenzenesulfonate complexes** Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1 H315-H317-H319	0 – < 1 Wt %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air. Consult a doctor immediately.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor immediately.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion:

Rinse mouth thoroughly with water. Do NOT induce vomiting. Consult a doctor immediately.

Self-protection of the first aider:

Use personal protection equipment.

4.2. Most important symptoms and effects, both acute and delayed

No known symptoms to date.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Observe risk of aspiration if vomiting occurs.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.
Carbon dioxide (CO2)
Extinguishing powder
alcohol resistant foam
Use water spray jet to protect personnel and to cool endangered containers.

Unsuitable extinguishing media:

High power water jet

5.2. Special hazards arising from the substance or mixture

During heating or in case of fire, toxic gases is possible.
The formation of combustible vapours is possible at temperatures above: Flash point
When hot, product develops flammable vapours.

Hazardous combustion products:

Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx), Gases/vapours, toxic During heating or in case of fire, toxic gases is possible.

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus. Protective clothing.

5.4. Additional information
Do not inhale explosion and combustion gases. Move undamaged containers from immediate hazard area if it can be done safely. 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

6.1.1. For non-emergency personnel
Personal precautions:
Use personal protection equipment. Special danger of slipping by leaking/spilling product. Remove persons to safety.

Protective equipment:
Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders
Personal protection equipment:
Use personal protection equipment.

6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up
For containment:
Suitable material for taking up: Sand, Kieselguhr, Universal binder, Chemical binding agents, containing acids

For cleaning up:
Remove from the water surface (e.g. skimming, sucking). Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Other information:
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections
Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

6.5. Additional information
Clear spills immediately. Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures
Advices on safe handling:
When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Avoid oil mist. Do not put any product-impregnated cleaning rags into your trouser pockets. Clear spills immediately. Use appropriate container to avoid environmental contamination.

Fire prevent measures:
No special fire protection measures are necessary.

Environmental precautions:
See section 8.

Advices on general occupational hygiene
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions:
Keep container tightly closed in a cool, well-ventilated place.

Requirements for storage rooms and vessels:
Suitable container/equipment material: Floors should be impervious, resistant to liquids and easy to clean. Shafts and sewers must be protected from entry of the product.
Keep/Store only in original container.

Hints on storage assembly:
not required

Storage class: 10 – Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:
Store in a cool dry place. Keep away from heat.

7.3. Specific end use(s)

Recommendation:
Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

See section 7. No additional measures necessary.

8.2.2. Personal protection equipment

Eye/face protection:
During transfer: Eye glasses with side protection

Skin protection:
Hand protection
Suitable material: NBR (Nitrile rubber), PVC (Polyvinyl chloride)
Thickness of the glove material: >= 0,4 mm
Breakthrough time (maximum wearing time) >480 min
Breakthrough times and swelling properties of the material must be taken into consideration.
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.

Suitable protective clothing: Protective clothing:

Respiratory protection:
Usually no personal respirative protection necessary.

8.2.3. Environmental exposure controls

See section 7. No additional measures necessary.

8.3. Additional information

Mineral oil mist limits:
OSHA PEL - value 5 mg / m³, ACGIH STEL - value of 10 mg / m³

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: liquid **Colour:** red
Odour: characteristic

Safety relevant basis data

parameter		at °C	method	Remark
pH	*not determined*			
Melting point/freezing point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	*not determined*			
Decomposition temperature (°C):	*not determined*			
Flash point	190 °C			
Evaporation rate	*not determined*			
Ignition temperature in °C	*not determined*			

parameter		at °C	method	Remark
Upper/lower flammability or explosive limits	*not determined*			
Vapour pressure	*not determined*			
Vapour density	*not determined*			
Density	882 kg/m³	20 °C		
Bulk density	*not determined*			
Water solubility (g/L)	insoluble			
Partition coefficient: n-octanol/ water	*not determined*			
Dynamic viscosity	*not determined*			
Kinematic viscosity	70 mm²/s	40 °C		

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No known hazardous reactions. Risk of explosion if heated under confinement.

10.2. Chemical stability
The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid
To avoid thermal decomposition do not overheat.

10.5. Incompatible materials
Materials to avoid: Acid, Oxidising agent, Reducing agent

10.6. Hazardous decomposition products
Hazardous combustion products: Carbon dioxide Carbon monoxide Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
64741-76-0	Distillates (petroleum), heavy hydrocracked	**LD_{50} oral:** 5,000 mg/kg (Rat) **LD_{50} dermal:** 2,000 mg/kg (Rab) **LC_{50} inhalative:** 5,000 mg/m³ (Rat)

Acute oral toxicity:
The product has not been tested.

Acute dermal toxicity:
No information available for acute dermal and inhalative toxicity.

Acute inhalation toxicity:
No information available for acute dermal and inhalative toxicity.

Skin corrosion/irritation:
No information available.

Eye damage/irritation:
No information available.

Respiratory or skin sensitisation:
Contains Calcium, C10-14-branched alkyl-2,3(or 3,4)-dimethylbenzenesulfonate C15-36-branched alkylmethylbenzenesulfonate complexes. May produce an allergic reaction.

Germ cell mutagenicity:
No indications of human germ cell mutagenicity exist.

Carcinogenicity:
This product contains mineral oils which are considered to be severely refined and not considered by IARC as carcinogenic. Based on the IP 346 test has been demonstrated that all of the oils contained in this product contain less than 3% extractables.

Reproductive toxicity:
No indications of human reproductive toxicity exist.

Aspiration hazard:
Observe risk of aspiration if vomiting occurs.

Additional information:
Frequently or prolonged contact with skin may cause dermal irritation.

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
64741-76-0	Distillates (petroleum), heavy hydrocracked	**LC_{50}:** 100 mg/l 4 d **NOEC:** 100 mg/l -∞ h **EC_{50}:** 10,000 mg/l 2 d **NOEC:** 100 mg/l -∞ h **NOEC:** 100 mg/l -∞ h **IC_{50}:** 100 mg/l 3 d

Aquatic toxicity:
The product has not been tested.

12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
64741-76-0	Distillates (petroleum), heavy hydrocracked	No	

Abiotic degradation:
The product has not been tested.

12.3. Bioaccumulative potential

CAS No.	Substance name	Log K_{OC}	Bioconcentration factor (BCF)
64741-76-0	Distillates (petroleum), heavy hydrocracked	6	

12.4. Mobility in soil
The product has not been tested.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
64741-76-0	Distillates (petroleum), heavy hydrocracked	—
90268-86-3	Calcium, C10-14-branched alkyl-2,3(or 3,4)-dimethylbenzenesulfonate C15-36-branched alkylmethylbenzenesulfonate complexes	—

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

12.6. Other adverse effects
The insoluble part can be precipitated mechanically in suitable sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal
Waste codes/waste designations according to EWC/AVV

Waste code product:

Remark:
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste code packaging:

Remark:
Dispose of waste according to applicable legislation.

Waste treatment options

Appropriate disposal / Product:
Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:
Non-contaminated packages may be recycled.

13.2. Additional information
No data available

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

14.1. UN-No.
not relevant
14.2. UN proper shipping name
not relevant
14.3. Transport hazard class(es)
not relevant
14.4. Packing group
not relevant
14.5. Environmental hazards
not relevant
14.6. Special precautions for user
not relevant

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

SECTION 15: Regulatory information

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

15.1.1. EU legislation
No data available

15.1.2. National regulations

[DE] National regulations

Water hazard class (WGK)
WGK:
2 - deutlich wassergefährdend
Description:
hazardous to water (WGK 2)
Source:
Classification according to VwVwS, Annex 4.

Technische Regeln für Gefahrstoffe
TRGS 510
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Berufsgenossenschaftliche Vorschriften (BGV)
Berufsgenossenschaftliche Informationen (BGI) 868
Berufsgenossenschaftliche Regeln (BGR) 189, 190, 192, 195

Other regulations, restrictions and prohibition regulations
Altöl-Verordnung (AltölV)

15.2. Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.

15.3. Additional information
No data available

SECTION 16: Other information

16.1. Indication of changes

SECTION 3: Composition / information on ingredients
SECTION 9: Physical and chemical properties
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 15: Regulatory information

16.2. Abbreviations and acronyms

See overview table at www.euphrac.eu
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

16.3. Key literature references and sources for data

67/548/EEC - Dangerous Substances Directive
1999/45/EEC - Dangerous Preparations Directive
EC 1907/2006 - REACH Regulation
1272/2008 EC - Regulation on classification, labeling and packaging of substances and mixtures, and amending Directives 67/548/EEC and 1999/45/EC and Regulation (EC) No 1907/2006
Regulation (EC) No 1907/2006 (REACH), Annex II
European Chemicals Agency (ECHA), C & L classification and labeling inventory
European Chemicals Agency (ECHA), ECHA CHEM Registered substances
OECD The Global Portal to Information on Chemical Substances (ChemPortal)
Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA): GESTIS substance database and International limit values for chemical substances
Federal Environment Agency, Section IV 2.4: Documentation and Information Centre substances hazardous to water Rigoletto (catalog substances hazardous to water)

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.