

MARLOWET R 11

Version: 4.06

Revision Date 2020/01/23

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier****Trade name** MARLOWET R 11**1.2 Relevant identified uses of the substance or mixture and uses advised against****Use** Industrial use
emulsifying agent
Uses advised against**1.3 Details of the supplier of the safety data sheet****Company** SASOL Germany GmbH
Anckelmannsplatz 1
20537 Hamburg
GermanyDistributed by: Palmer Holland, Inc.
25000 Country Club Blvd., Suite 444
North Olmsted, OH 44070-5331Telephone: +49 40 63684-1000
Telefax: +49 40 63684-3700Emergency Telephone No.:
Palmer Holland: 800-635-4822
Chemtrec: 800-424-9300**Information (Product safety):** Telephone: + 49 (0) 23 65 - 49 47 05
Telefax: + 49 (0) 23 65 - 49 92 40**E-mail address** msds-info.germany@de.sasol.com**1.4 Emergency telephone number****Emergency telephone number** + 49 (0) 23 65 - 49 22 32**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

2.2 Label elements

Not a hazardous substance or mixture.

2.3 Other hazards

No hazards to be specially mentioned.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance in the meaning of regulation (EC) 1907/2006.

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CHEMICAL CHARACTERIZATIONcastor oil, ethoxylated ($\geq 6,5$ EO)**component type:** Active ingredient**EC-No.:**
REACH No.: Not relevant (polymer)**Index-No.:****CAS-No.:** 61791-12-6**COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES**

No hazardous ingredients

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	No hazards which require special first aid measures.
If inhaled	Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, give oxygen if necessary. Consult a physician.
In case of skin contact	Wash off with soap and water.
In case of eye contact	Rinse with plenty of water.
If swallowed	Consult a physician if necessary. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed	Symptoms: No information available. Risks: No information available.
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4.3 Indication of any immediate medical attention and special treatment needed

Indication of any immediate medical attention and special treatment needed	Treatment: No information available.
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SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing media	Water, Foam, Dry powder, Carbon dioxide (CO ₂)
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5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	Dangerous gases or fumes may occur in case of fire.
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5.3 Advice for firefighters

Special protective equipment for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
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Further information

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions Handle in accordance with good industrial hygiene and safety practice.

Special precautions Forms slippery/greasy layers with water.

6.2 Environmental precautions

Environmental precautions Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Use mechanical handling equipment. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

Advice on safe handling No special technical protective measures required.

Advice on protection against fire and explosion Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers No special storage conditions required.

Other data Protect from frost, heat and sunlight.

7.3 Specific end use(s)

Specific use(s) This information is not available.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters**COMPONENTS WITH WORKPLACE CONTROL PARAMETERS****National occupational exposure limits**

No data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

No data available

DERIVED NO EFFECT LEVEL (DNEL)**Substance name: castor oil, ethoxylated (>=6,5 EO)**

No data available

PREDICTED NO EFFECT CONCENTRATION (PNEC)**Substance name: castor oil, ethoxylated (>=6,5 EO)**

No data available

8.2 Exposure controls**PERSONAL PROTECTIVE EQUIPMENT****Respiratory protection**

No personal respiratory protective equipment normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.

Hand protection

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

gloves suitable for permanent contact:

Material: butyl-rubber
Break through time: >= 480 min
Layer thickness: >= 0.7 mm

gloves suitable for splash protection:

Material: Nitrile rubber/nitrile latex
Break through time: >= 30 min

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Layer thickness: ≥ 0.4 mm

Eye protection	Safety glasses
Skin and body protection	Wear suitable protective equipment.
Hygiene measures	General industrial hygiene practice.
Protective measures	No special protective equipment required.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	liquid; 20 °C; 1,013 hPa
Form	liquid
Colour	yellowish
Odour	mild
Odour Threshold	No valid method available.
pH	5 - 7; 20 g/l; 20 °C
Melting point/range	ca. -40 °C
Boiling point/boiling range	Not applicable
Flash point	ca. 270 °C; DIN 51376
Evaporation rate	No data available
Flammability (solid, gas)	not applicable (liquid)
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	< 0.1 hPa; 20 °C
Relative vapour density	> 1
Density	ca. 1.0 g/cm ³ ; 20 °C
Water solubility	emulsifiable
Partition coefficient: n-octanol/water	Not relevant / Not applicable Justification: surface-active substance
Ignition temperature	> 300 °C; DIN 51794
Auto-ignition temperature	not auto-flammable
Viscosity, kinematic	No data available
Explosive properties	not expected based on structure and functional groups

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Oxidizing properties not expected based on structure and functional groups

9.2 Other data

Additional advice no data

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

Note Stable at normal ambient temperature and pressure.
No decomposition if stored and applied as directed.

10.2 Chemical stability

Note No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions None known.

10.4 Conditions to avoid

Conditions to avoid Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation.

10.5 Incompatible materials to avoid

Materials to avoid None known.;

10.6 Hazardous decomposition products

Hazardous decomposition products No decomposition if stored normally.

Thermal decomposition No decomposition if used as directed.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Acute oral toxicity castor oil, ethoxylated ($\geq 6,5$ EO):
LD50 Rat: > 5,000 mg/kg; OECD Test Guideline 401
Category approach
Based on available data, the classification criteria are not met.

Acute inhalation toxicity castor oil, ethoxylated ($\geq 6,5$ EO):
No data available

Acute dermal toxicity castor oil, ethoxylated ($\geq 6,5$ EO):
Based on available data, the classification criteria are not met.
Justification:
Data are available from alternate exposure routes.
The substance or mixture has no acute oral toxicity

Skin corrosion/irritation

Skin irritation castor oil, ethoxylated ($\geq 6,5$ EO):
Rabbit: slightly irritating; OECD Test Guideline 404

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Category approach
Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eye irritation castor oil, ethoxylated ($\geq 6,5$ EO):
Rabbit: not irritating; OECD Test Guideline 405
Category approach
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Sensitisation castor oil, ethoxylated ($\geq 6,5$ EO):
Mouse local lymphnode assay : not sensitizing; OECD Test Guideline 406
Category approach
Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro castor oil, ethoxylated ($\geq 6,5$ EO):
Ames test; Salmonella typhimurium; with and without metabolic activation: Non
mutagenic; OECD Test Guideline 471
Category approach

Remarks castor oil, ethoxylated ($\geq 6,5$ EO):
Based on available data, the classification criteria are not met.

Carcinogenicity

Carcinogenicity castor oil, ethoxylated ($\geq 6,5$ EO):
This information is not available.

Reproductive toxicity

Reproductive toxicity castor oil, ethoxylated ($\geq 6,5$ EO):
This information is not available.

Teratogenicity castor oil, ethoxylated ($\geq 6,5$ EO):
This information is not available.

STOT - single exposure

Remarks castor oil, ethoxylated ($\geq 6,5$ EO):
The substance or mixture is not classified as specific target organ toxicant, single
exposure.

STOT - repeated exposure

Remarks castor oil, ethoxylated ($\geq 6,5$ EO):
The substance or mixture is not classified as specific target organ toxicant,
repeated exposure.

Repeated dose toxicity castor oil, ethoxylated ($\geq 6,5$ EO):

No data available

Aspiration hazard

Aspiration toxicity castor oil, ethoxylated ($\geq 6,5$ EO):
Not applicable

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	castor oil, ethoxylated ($\geq 6,5$ EO): LC50 (96 h) Danio rerio (zebra fish): > 100 mg/l ; semi-static test; OECD Test Guideline 203 Category approach
Toxicity to daphnia and other aquatic invertebrates	castor oil, ethoxylated ($\geq 6,5$ EO): EC50 (48 h) Daphnia magna (Water flea): > 10 - 100 mg/l ; static test; OECD Test Guideline 202 Category approach
Toxicity to aquatic plants	castor oil, ethoxylated ($\geq 6,5$ EO): EC50 (72 h) Desmodesmus subspicatus (green algae): > 100 mg/l ; static test; OECD Test Guideline 201; Category approach
Toxicity to bacteria	castor oil, ethoxylated ($\geq 6,5$ EO): EC50 (4.67 h) Pseudomonas putida: > 990 mg/l; oxygen consumption test Category approach

12.2 Persistence and degradability

Biodegradability	castor oil, ethoxylated ($\geq 6,5$ EO): Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 301B Category approach
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12.3 Bioaccumulative potential

Bioaccumulation	castor oil, ethoxylated ($\geq 6,5$ EO): No data available
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12.4 Mobility in soil

Mobility	castor oil, ethoxylated ($\geq 6,5$ EO): No data available
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12.5 Results of PBT and vPvB assessment

Results of PBT assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Results of PBT assessment	castor oil, ethoxylated ($\geq 6,5$ EO): This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

General advice	castor oil, ethoxylated ($\geq 6,5$ EO): None known.
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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product	Can be incinerated, when in compliance with local regulations.
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Contaminated packaging

Empty remaining contents.

waste code of the European Union: EWC

A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose. The waste code must be determined in agreement with the regional waste disposal authority or company.

SECTION 14: TRANSPORT INFORMATION**14.1 UN number**

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
ICAO/IATA	Not dangerous goods

14.2 Proper shipping name

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
ICAO/IATA	Not dangerous goods

14.3 Transport hazard class

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
ICAO/IATA	Not dangerous goods

14.4 Packing group

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
ICAO/IATA	Not dangerous goods

14.5 Environmental hazards

ADR	Environmentally hazardous	no
RID	Environmentally hazardous	no
ADN	Environmentally hazardous	no
IMDG	Marine pollutant	no
ICAO/IATA	Environmentally hazardous	no

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

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

Remarks	No information available.
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SECTION 15: REGULATORY INFORMATION

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

NATIONAL/OTHER REGULATIONS

Legislation on the control of major-accident hazards involving dangerous substances	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. list entry in the directive:: Not applicable
Other regulations	This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

NOTIFICATION STATUS

Switzerland. Consolidated Inventory (based on EU-EINECS and EU-NLP)	CH INV	listed (product or constituents are listed)
Canadian Domestic Substances List (DSL)	DSL	listed (product or constituents are listed)
Australia Inventory of Chemical Substances (AICS)	AICS	listed (product or constituents are listed)
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	listed (product or constituents are listed)
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	listed (product or constituents are listed)
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	listed (product or constituents are listed)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	listed (product or constituents are listed)
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC	listed (product or constituents are listed)
Taiwan Chemical Substance Inventory (TCSI)	TCSI	listed (product or constituents are listed)
United States TSCA Inventory	TSCA	listed (product or constituents are listed)

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

15.2 Chemical safety assessment

castor oil, ethoxylated (>=6,5 EO)

A Chemical Safety Assessment is not required for this substance (exempted from obligation to register).

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SECTION 16: OTHER INFORMATION

Safety datasheet sections which have been updated:

15. Regulatory information

Further information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Key or legend to abbreviations and acronyms used in the safety data sheet

ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
AICS	Australian Inventory of Chemical Substances
ANSI	American National Standards Institute
ASTM	American Society of Testing and Materials (US)
BCF	Bioconcentration factor
CLP	Regulation on Classification, Labelling and Packaging of Substances and Mixtures
DIN	Deutsches Institut für Normung
DNEL	Derived No-Effect Level
DSL	Domestic Substances List
EC...	Effect concentration ... %
ENCS	Existing Notified Chemical Substances (Japan)
EWC	European Waste Catalogue
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISHL	Industrial Safety and Health Law (Japan)
ISO	International Organization for Standardization
IUAPC	International Union of Pure and Applied Chemistry
KECI	Korea Existing Chemicals Inventory
LC...	Lethal Concentration, ...%
LD...	Lethal Dose, ...%
MARPOL	International Convention for the Prevention of Pollution From Ships
NDSL	Non-Domestic Substances List
NOAEL	no observable adverse effect level
NOEL/NOEC	No Observed-effect level/concentration
NZIoC	New Zealand Inventory of Chemicals
OECD	Organisation for Economic Co-operation and Development
PBT	persistent, bioaccumulative, toxic
PICCS	Philippine Inventory of Chemicals and Chemical Substances
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport international ferroviaire de marchandises dangereuses
TG	Test Guideline
TRGS	Technische Regeln für Gefahrstoffe
TSCA	Toxic Substances Control Act
vPvB	very persistent, very bioaccumulative
WGK	Wassergefährdungsklasse