MARLIPAL 24/50

Version: *11*.02 **Revision Date 05.08.2019**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name **MARLIPAL 24/50**

Substance name (REACH / CLP) Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)

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

Use
Industrial use
raw material for washing and cleaning agents
emulsifying agent
surface-active substance

Uses advised against

1.3 Details of the supplier of the safety data sheet

Company
SASOL Germany GmbH
Anckelmannsplatz 1
20537 Hamburg
Germany

Telephone: +49 40 63684-1000
Telefax: +49 40 63684-3700

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)

Serious eye damage Category 1	Causes serious eye damage.
Short-term (acute) aquatic hazard Category 1	Very toxic to aquatic life.
Long-term (chronic) aquatic hazard Category 3	Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word	Danger
Hazard statements	
H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	
P273	Avoid release to the environment.
P280	Wear eye protection/ face protection.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P391	Collect spillage.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

Danger of slipping after spill or leakage.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

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

Alcohols, C12-14, ethoxylated (>=2.5 EO)

component type: Active ingredient

EC-No.: 932-106-6 **Index-No.:** **CAS-No.:** 68439-50-9
REACH No.: Not relevant (polymer)
Substance name (REACH / CLP): Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)

Classification (Regulation (EC) No 1272/2008):	Eye Dam.	1	H318
	Aquatic Acute	1	H400
	Aquatic Chronic	3	H412

Specific Concentration Limits (see section 11)

> 10 %	Eye Dam. Category 1; H318
> 1 - 10 %	Eye Irrit. Category 2; H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	If you feel unwell, seek medical advice (show the label where possible). Take off all contaminated clothing immediately.
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 immediately with plenty of water. Consult a physician if necessary.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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.

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.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Water spray, Dry powder, Foam, Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	Dangerous gases or fumes may occur in case of fire.

5.3 Advice for firefighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment.

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	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). The material taken up must be disposed of in accordance with regulations.

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	Wear personal protective equipment. Avoid contact with skin and eyes.
Advice on protection against fire and explosion	Normal measures for preventive fire protection. Do not spray on a naked flame or any incandescent material.
Fire-fighting class	B: Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	Keep tightly closed in a dry and cool place.
Storage class (TRGS 510)	10-13: German Storage Class 10 to 13
Other data	Stable at normal ambient temperature and pressure.

7.3 Specific end use(s)

Specific use(s)	This information is not available.

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: Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)

No data available

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)

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 Layer thickness: >= 0,4 mm
Eye protection	Tightly fitting safety goggles, Safety glasses with side-shields
Skin and body protection	Wear suitable protective equipment.
Hygiene measures	Avoid contact with the skin and the eyes. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke.
Protective measures	Avoid contact with the skin and the eyes. Wear suitable gloves and eye/face protection.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.

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	colourless
Odour	mild
Odour Threshold	No valid method available.
pH	5 - 7; 20 g/l; 20 °C
Melting point/range	8 °C

Boiling point/boiling range	Not applicable
Flash point	182 °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.0,96 g/cm3; 20 °C
Water solubility	20 °C; completely miscible
Partition coefficient: n-octanol/water	Not applicable Justification: surface-active substance
Ignition temperature	ca. 320 °C; DIN 51794
Auto-ignition temperature	not auto-flammable
Viscosity, dynamic	No data available
Explosive properties	not expected based on structure and functional groups
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.

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	Strong acids and oxidizing agents;

10.6 Hazardous decomposition products

Hazardous decomposition products	No decomposition if stored and applied as directed.
Thermal decomposition	Hazardous decomposition products formed under fire conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): LD50 Rat: > 2.000 mg/kg Category approach own test results/literature values Based on available data, the classification criteria are not met.
Acute inhalation toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): No data available
Acute dermal toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): LD50 Rabbit: > 2.000 mg/kg; Category approach (literature value) Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation	Alcohols, C12-14, ethoxylated (>=2.5 EO): Rabbit: not irritating own test results/literature values Category approach Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eye irritation	Alcohols, C12-14, ethoxylated (>=2.5 EO): Rabbit: Irreversible effects on the eye own test results/literature values Category approach Causes serious eye damage. Alcohols, C12-14, ethoxylated (>=2.5 EO): Category approach Test substance: 10% dilution Causes serious eye irritation.

Respiratory or skin sensitisation

Sensitisation	Alcohols, C12-14, ethoxylated (>=2.5 EO): Maximisation Test Guinea pig: not sensitizing Category approach (literature value) Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro	Alcohols, C12-14, ethoxylated (>=2.5 EO): In vitro tests did not show mutagenic effects Category approach own test results/literature values
Genotoxicity in vivo	Alcohols, C12-14, ethoxylated (>=2.5 EO): In vivo tests did not show mutagenic effects Category approach (literature value)
Remarks	Alcohols, C12-14, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): The substance has been shown to be not genotoxic, therefore it is not expected to

	have a carcinogenic potential. Category approach (literature value)
Remarks	Alcohols, C12-14, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): No toxicity to reproduction Category approach (literature value)
RemarksReproductive toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.
Teratogenicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): Did not show teratogenic effects in animal experiments. Category approach (literature value)
Remarks-Teratogenicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): Based on available data, the classification criteria are not met.

STOT - single exposure

Remarks	Alcohols, C12-14, ethoxylated (>=2.5 EO): The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Remarks	Alcohols, C12-14, ethoxylated (>=2.5 EO): The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Repeated dose toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): Rat; Oral; 2 years NOAEL: 50 mg/kg (based on body weight and day) Target Organs: Heart, Liver, Kidney Symptoms: reduced body weight gain, increased relative organ weights Category approach (literature value)

Aspiration hazard

Aspiration toxicity	Alcohols, C12-14, ethoxylated (>=2.5 EO): Not applicable
Toxicological information	Alcohols, C12-14, ethoxylated (>=2.5 EO): Toxicokinetics Category approach The substance is expected to be rapidly absorbed and excreted. (literature value)

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	Alcohols, C12-14, ethoxylated (>=2.5 EO): LC50 (96 h) Cyprinus carpio (Carp): > 0,1 - 1 mg/l ; flow-through test; OECD Test Guideline 203

	own test results/literature values Category approach
Toxicity to daphnia and other aquatic invertebrates	Alcohols, C12-14, ethoxylated (>=2.5 EO): EC50 (48 h) Daphnia magna (Water flea): > 0,1 - 1 mg/l ; static test; own test results/literature values Category approach
Toxicity to aquatic plants	Alcohols, C12-14, ethoxylated (>=2.5 EO): EC50 (72 h) Desmodesmus subspicatus (green algae): > 0,1 - 1 mg/l ; static test; own test results/literature values; Category approach Alcohols, C12-14, ethoxylated (>=2.5 EO): EC10 (72 h) Desmodesmus subspicatus (green algae): > 0,1 - 1 mg/l ; static test; own test results/literature values; Category approach
Toxicity to bacteria	Alcohols, C12-14, ethoxylated (>=2.5 EO): EC50 activated sludge: 140 mg/l; Respiration inhibition Category approach (literature value)
Toxicity to terrestrial flora	Alcohols, C12-14, ethoxylated (>=2.5 EO): emergence, growth; NOEC: 10 mg/kg; Lepidium sativum (cress); OECD Test Guideline 208 own test results/literature values Category approach
Toxicity for other terrestrial non-mammalian fauna	Alcohols, C12-14, ethoxylated (>=2.5 EO): No data available

12.2 Persistence and degradability

Biodegradability	Alcohols, C12-14, ethoxylated (>=2.5 EO): Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 301B own test results/literature values Category approach

12.3 Bioaccumulative potential

Bioaccumulation	Alcohols, C12-14, ethoxylated (>=2.5 EO): Bioaccumulation is unlikely. (literature value)

12.4 Mobility in soil

Mobility	Alcohols, C12-14, ethoxylated (>=2.5 EO): adsorption/desorption (soil); Koc: 87 - 304; QSAR Mobile in soils

12.5 Results of PBT and vPvB assessment

Results of PBT assessment	Alcohols, C12-14, ethoxylated (>=2.5 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). Category approach

12.6 Other adverse effects

General advice	Alcohols, C12-14, ethoxylated (>=2.5 EO): Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product	Can be incinerated, when in compliance with local regulations.
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	3082
RID	3082
ADN	3082
IMDG	3082
ICAO/IATA	3082

14.2 Proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated)
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated)

14.3 Transport hazard class

ADR	9
RID	9
ADN	9
IMDG	9
ICAO/IATA	9

14.4 Packing group

ADR	III
RID	III
ADN	III
IMDG	III
ICAO/IATA	III

14.5 Environmental hazards

ADR	Environmentally hazardous	yes
RID	Environmentally hazardous	yes
ADN	Environmentally hazardous	yes
IMDG	Marine pollutant	yes
ICAO/IATA	Environmentally hazardous	yes

14.6 Special precautions for user

ADR	Hazard Identification Number		90
	Labels		9
	Tunnel restriction code		(-)
IMDG	Labels 9		
	EmS Number 1	F-A	
	EmS Number 2	S-F	
ICAO/IATA	Labels		9MI

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

Remarks	No information available.

SECTION 15: REGULATORY INFORMATION

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

Occupational restrictions	Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

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:: ENVIRONMENTAL HAZARDS; E1 Qualifiying quantity 1: 100 t; Qualifiying quantity 2: 200 t;
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	CH INV	listed (product or constituents are listed)
US. Toxic Substances Control Act	TSCA	listed (product or constituents are listed)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	DSL	listed (product or constituents are listed)
Australia. Industrial Chemical (Notification and Assessment) Act	AICS	listed (product or constituents are listed)
Japan. Kashin-Hou Law List	ENCS (JP)	listed (product or constituents are listed)
Japan. Industrial Safety & Health Law (ISHL) List	ISHL (JP)	listed (product or constituents are listed)
Korea. Existing Chemicals Inventory (KECI)	KECI (KR)	listed (product or constituents are listed)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	listed (product or constituents are listed)
China. Inventory of Existing Chemical Substances (IECSC)	INV (CN)	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

Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)

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

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Safety datasheet sections which have been updated:

11. Toxicological information
12. Ecological 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