

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Trade name	ISOFOL 20
INCI	Octyldodecanol
REACH No.	01-2119488016-36-0000
Substance name (REACH / CLP)	2-octyldodecan-1-ol

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

Use	Industrial use raw material for cosmetic agents raw material for washing and cleaning agents raw material for textile auxiliary agents raw material for synthesis processes in the chemical industry raw material for lubricants and lubricant additives raw material for welding and soldering aids
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) 5 51 - 1 92 40 (GIZ-Nord Poisons Centre)
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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

Danger of slipping after spill or leakage.

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

CHEMICAL CHARACTERIZATION**2-octyldodecan-1-ol****component type:** Active ingredient**EC-No.:** 226-242-9**Index-No.:****CAS-No.:** 5333-42-6**REACH No.:** 01-2119488016-36-0000**Substance name (REACH / CLP):** 2-octyldodecan-1-ol**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	Take off all contaminated clothing immediately.
In case of eye contact	Rinse with water.
If swallowed	Call a physician immediately.

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 spray, Dry powder, Foam, Carbon dioxide (CO₂)**5.2 Special hazards arising from the substance or mixture**

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

Specific hazards during firefighting

Dangerous gases or fumes may occur in case of fire.

5.3 Advice for firefighters
Special protective equipment for firefighters

Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

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. Danger of slipping after spill or leakage.

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).

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

Handle in accordance with good industrial hygiene and safety practice. Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion

The product is flammable but not readily ignited. Normal measures for preventive fire protection.

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
Storage class (TRGS 510)

10-13: German Storage Class 10 to 13

Other data

Stable under normal conditions.

7.3 Specific end use(s)
Specific use(s)

This information is not available.

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

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: 2-octyldodecan-1-ol**

Not relevant / Not applicable

PREDICTED NO EFFECT CONCENTRATION (PNEC)**Substance name: 2-octyldodecan-1-ol**

Not relevant / Not applicable

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: Nitrile rubber/nitrile latex
Break through time: >= 480 min
Layer thickness: 0,35 mm

Material: butyl-rubber
Break through time: >= 480 min
Layer thickness: 0,5 mm

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

Eye protection	Safety glasses
Skin and body protection	Wear suitable protective equipment.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Protective measures	Avoid contact with the skin and the eyes.

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	colourless
Odour	characteristic
Odour Threshold	No valid method available.
pH	Not applicable, Justification:, insoluble
Melting point/range	ca. -4 - 1 °C
Initial boiling point and boiling range	> 223 °C; 1.013 hPa
Flash point	ca. > 170 °C; DIN 51758
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	ca. < 0,01 hPa; 20 °C
Relative vapour density	> 1
Density	ca.0,8 g/cm ³ ; 20 °C; DIN 51757
Water solubility	insoluble
Partition coefficient: n-octanol/water	log Pow: > 8; 23 °C; pH: 7,1; OECD Test Guideline 117
Ignition temperature	258 °C
Viscosity, dynamic	ca. 60 mPas; 20 °C
Explosive properties	Constituents do not contain chemical groups associated with explosivity.
Oxidizing properties	not expected based on structure and functional groups

9.2 Other data

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

Additional advice

This sheet describes a group of products. It only contains safety-relevant data. For specific data, see Product Information sheet.

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

Stable under recommended storage conditions.

10.2 Chemical stability**Note**

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions**Hazardous reactions**

Stable under normal conditions.

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**Thermal decomposition**

> 350 °C

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

2-octyldodecan-1-ol:
LD50 Rat: > 5.000 mg/kg
Based on available data, the classification criteria are not met.

Acute inhalation toxicity

2-octyldodecan-1-ol:
study scientifically unjustified
Data are available from alternate exposure routes.

Acute dermal toxicity

2-octyldodecan-1-ol:
LD50 Rabbit: > 2 ml/kg
Based on available data, the classification criteria are not met.

Skin corrosion/irritation**Skin irritation**

2-octyldodecan-1-ol:
Rabbit: slightly irritating
Based on available data, the classification criteria are not met.

Human experience -Skin contact

2-octyldodecan-1-ol:
Skin
not irritating

Serious eye damage/eye irritation

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

Eye irritation	2-octyldodecan-1-ol: Rabbit: slightly irritating Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	
Sensitisation	2-octyldodecan-1-ol: Maximisation Test Guinea pig: not sensitizing (literature value) Based on available data, the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity in vitro	2-octyldodecan-1-ol: In vitro tests did not show mutagenic effects (literature value) Category approach
Genotoxicity in vivo	2-octyldodecan-1-ol: The study is not necessary. In vitro tests did not show mutagenic effects Category approach
Remarks	2-octyldodecan-1-ol: Based on available data, the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	2-octyldodecan-1-ol: The study is not necessary. Justification: The substance has been shown to be not genotoxic, therefore it is not expected to have a carcinogenic potential.
Reproductive toxicity	
Reproductive toxicity	2-octyldodecan-1-ol: Rat; Oral NOAEL ((parents)): > 1.000 mg/kg (based on body weight and day) NOAEL (F1): > 1.000 mg/kg (based on body weight and day) (literature value) The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Test substance: Docosan-1-ol
RemarksReproductive toxicity	2-octyldodecan-1-ol: Based on available data, the classification criteria are not met.
Teratogenicity	2-octyldodecan-1-ol: Rat; Oral NOAEL: 1.000 mg/kg (based on body weight and day) NOAEL (pregnant female): 1.000 mg/kg (based on body weight and day); OECD Test Guideline 414 Did not show teratogenic effects in animal experiments.
Remarks-Teratogenicity	2-octyldodecan-1-ol: Rabbit; Oral NOAEL: > 2.000 mg/kg (based on body weight and day) NOAEL (pregnant female): > 2.000 mg/kg (based on body weight and day) (literature value) The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Test substance: Docosan-1-ol
Remarks-Teratogenicity	2-octyldodecan-1-ol: Based on available data, the classification criteria are not met.
STOT - single exposure	

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

Remarks	2-octyldodecan-1-ol: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	
Remarks	2-octyldodecan-1-ol: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Repeated dose toxicity	2-octyldodecan-1-ol: Rat; Oral; Subchronic toxicity NOAEL: 839,6 mg/kg (based on body weight and day) (literature value)
Aspiration hazard	
Aspiration toxicity	2-octyldodecan-1-ol: Not applicable
Toxicological information	
	2-octyldodecan-1-ol: The substance is metabolised and excreted. Bioaccumulation is unlikely.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	2-octyldodecan-1-ol: LC50 (48 h) Leuciscus idus (Golden orfe): > 100 mg/l ; static test; DIN 38412 Category approach
Toxicity to fish - Chronic toxicity	2-octyldodecan-1-ol: The study is not necessary. Justification: Substance is readily biodegradable and has a low aquatic toxicity.
Toxicity to daphnia and other aquatic invertebrates	2-octyldodecan-1-ol: EC50 (48 h) Daphnia magna (Water flea) ; static test; OECD Test Guideline 202 In the range of water solubility not toxic under test conditions. Category approach
Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity	2-octyldodecan-1-ol: The study is not necessary. Justification: Substance is readily biodegradable and has a low aquatic toxicity.
Toxicity to aquatic plants	2-octyldodecan-1-ol: ErC50 (72 h) Desmodesmus subspicatus (green algae) ; static test; DIN 38412; In the range of water solubility not toxic under test conditions.
Toxicity to bacteria	2-octyldodecan-1-ol: EC0 (3 h) activated sludge of a predominantly domestic sewage: > 1.000 mg/l; Respiration inhibition; OECD Test Guideline 209
Toxicity to soil dwelling organisms	2-octyldodecan-1-ol: No data available
Toxicity to terrestrial flora	2-octyldodecan-1-ol: No data available
Toxicity for other terrestrial non-mammalian fauna	2-octyldodecan-1-ol: No data available

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

12.2 Persistence and degradability

Biodegradability 2-octyldodecan-1-ol:
Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 310

12.3 Bioaccumulative potential

Bioaccumulation 2-octyldodecan-1-ol:
Bioconcentration factor (BCF): 53 - 539; calculated (literature value)
Bioaccumulation is unlikely.

12.4 Mobility in soil

Mobility 2-octyldodecan-1-ol:
Adsorption/Soil/Sewage sludge; log Koc: 8,92 - 9,79; OECD Test Guideline 121
immobile
strong adsorption to soil
The substance and its relevant degradation products decompose rapidly.

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.

Results of PBT assessment 2-octyldodecan-1-ol:
This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Based on available data, the classification criteria are not met.

12.6 Other adverse effects

General advice 2-octyldodecan-1-ol:
None known.

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 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

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

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.

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
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ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

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**2-octyldodecan-1-ol**

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION**Safety datasheet sections which have been updated:**

- 11. Toxicological information
- 12. Ecological information
- 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.

ISOFOL 20

Version: 4.15

Revision Date 22.11.2019

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

Annex

Attachments to the safety data sheet and/or lists of the identified uses for the listed substances can be downloaded using the internet links below.

2-octyldodecan-1-ol

http://www.sasolgermany.de/fileadmin/doc/productsafety/Annex/000000000072_EN_01.pdf