

LIPOXOL 4000 FLAKES

Version: 4.07

Revision Date 2017/03/06

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier****Trade name** LIPOXOL 4000 Flakes**1.2 Relevant identified uses of the substance or mixture and uses advised against****Use** Industrial use
raw material for washing and cleaning agents
raw material for textile auxiliary agents**Uses advised against****1.3 Details of the supplier of the safety data sheet****Company** SASOL Germany GmbH
Anckelmannsplatz 1
20537 HamburgTelephone: +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)**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

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 CHARACTERIZATION

polyethylene glycol > 600

component type: Active ingredient**EC-No.:**
REACH No.: Not relevant (polymer)**Index-No.:****CAS-No.:** 25322-68-3**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 dangerous ingredients according to Regulation (EC) No. 1907/2006

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 plenty of water.
In case of eye contact	Rinse with plenty of water.
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.
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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 (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	In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus for firefighting if necessary.
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Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool closed containers exposed to fire with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid dust formation.

6.2 Environmental precautions

Environmental precautions No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Use mechanical handling equipment. The material taken up must be disposed of in accordance with regulations. Avoid dust formation.

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 When processing the product, the formation and enrichment of dusts must be avoided.
Dust can form an explosive mixture in air.

Advice on protection against fire and explosion 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

Requirements for storage areas and containers Keep tightly closed. Keep in a dry place.

Storage class (TRGS 510) 10-13: German Storage Class 10 to 13

Other data Stable under normal conditions.

container material suitable materials: Steel

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

Control parameters / Substance name	Typ	Control parameters	Update	Basis
POLYETHYLENE GLYCOLS (AS A PARTICULATE)	TWA	10 mg/m3	2009	WEEL Guides List

No data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

No data available

DERIVED NO EFFECT LEVEL (DNEL)

Substance name: polyethylene glycol > 600

No data available

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: polyethylene glycol > 600

No data available

8.2 Exposure controls

ENGINEERING MEASURES

In case of dust being formed, provide for adequate extraction.

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 dust, fibres and smoke occur, use self-contained breathing apparatus or breathing apparatus with a type P2 or P3 filter, in compliance with EN 143.
Hand protection	Coordinate hand protection with other chemicals used. Preventive hand protection is recommended., Use barrier cream regularly.
Eye protection	Safety glasses
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust or spray mist. Use barrier cream regularly.
Protective measures	No special protective equipment required.

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ENVIRONMENTAL EXPOSURE CONTROLS

General advice No special environmental precautions required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	solid; 20 °C; 1,013 hPa
Form	flakes
Colour	white
Odour	mild
Odour Threshold	No data available
pH	4 - 7; 100 g/l; 20 °C
Melting point/range	50 - 58 °C
Boiling point/boiling range	Not applicable
Flash point	ca. 250 °C; DIN ISO 2592
Evaporation rate	Not applicable Justification: Solid
Flammability (solid, gas)	No data available
Lower explosion limit	Not applicable Justification: Solid
Upper explosion limit	Not applicable Justification: Solid
Vapour pressure	< 0.1 hPa
Relative vapour density	No data available
Density	1.21 g/cm ³
Relative density	; No information available.
Water solubility	ca. 500 g/l; 20 °C
Partition coefficient: n-octanol/water	No data available
Ignition temperature	ca. 420 °C; DIN 51794
Auto-ignition temperature	Not applicable solid with a melting point < 160°C
Viscosity, dynamic	115 - 170 mPas; 20 °C Höppler (50% H ₂ O)
Explosive properties	not expected based on structure and functional groups
Oxidizing properties	No data available

9.2 Other data

Additional advice During processing, dust may form explosive mixture in air.

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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 normally.

10.3 Possibility of hazardous reactions

Hazardous reactions None known.

10.4 Conditions to avoid

Conditions to avoid Exposure to moisture
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 No decomposition if used as directed.

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

Acute oral toxicity polyethylene glycol > 600:
LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 401
Based on available data, the classification criteria are not met.
Category approach

Acute inhalation toxicity polyethylene glycol > 600:
No data available

Acute dermal toxicity polyethylene glycol > 600:
LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 402
Based on available data, the classification criteria are not met.
Category approach

Skin corrosion/irritation

Skin irritation polyethylene glycol > 600:
Rabbit: not irritating; OECD Test Guideline 404
Based on available data, the classification criteria are not met.
Category approach

Serious eye damage/eye irritation

Eye irritation polyethylene glycol > 600:
Rabbit: not irritating; OECD Test Guideline 405
Based on available data, the classification criteria are not met.
Category approach

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Respiratory or skin sensitisation

Sensitisation polyethylene glycol > 600:
Buehler Test Guinea pig: not sensitizing; OECD Test Guideline 406
Based on available data, the classification criteria are not met.
Category approach

Germ cell mutagenicity

Genotoxicity in vitro polyethylene glycol > 600:
Ames test; Salmonella typhimurium; with and without metabolic activation: not
mutagenic; OECD Test Guideline 471
Category approach

Remarks polyethylene glycol > 600:
Based on available data, the classification criteria are not met.

Carcinogenicity

Carcinogenicity polyethylene glycol > 600:
This information is not available.

Reproductive toxicity

Reproductive toxicity polyethylene glycol > 600:
No data available

STOT - single exposure

Remarks polyethylene glycol > 600:
The substance or mixture is not classified as specific target organ toxicant, single
exposure.

STOT - repeated exposure

Remarks polyethylene glycol > 600:
The substance or mixture is not classified as specific target organ toxicant,
repeated exposure.

Repeated dose toxicity polyethylene glycol > 600:
Rat; Oral; 90-day
NOAEL: 4,000 mg/kg (based on body weight and day)
Target Organs: Liver
literature value

polyethylene glycol > 600:
Rat; Oral; 2 Years
NOAEL: 1,000 mg/kg (based on body weight and day)
Symptoms: reduced body weight gain
literature value

Aspiration hazard

Aspiration toxicity polyethylene glycol > 600:
Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish polyethylene glycol > 600:
LC50 (96 h) Cyprinus carpio (Carp): > 100 mg/l ; semi-static test; OECD Test

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	Guideline 203 Category approach
Toxicity to fish - Chronic toxicity	polyethylene glycol > 600: No data available
Toxicity to daphnia and other aquatic invertebrates	polyethylene glycol > 600: EC50 (48 h) Daphnia magna (Water flea): > 100 mg/l ; static test; OECD Test Guideline 202 Category approach
Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity	polyethylene glycol > 600: No data available
Toxicity to aquatic plants	polyethylene glycol > 600: EC50 (72 h) Desmodesmus subspicatus (green algae): > 100 mg/l ; Growth rate; static test; OECD Test Guideline 201; Category approach polyethylene glycol > 600: NOEC (72 h) Desmodesmus subspicatus (green algae): 450 mg/l ; Biomass; static test; OECD Test Guideline 201; Category approach
Toxicity to soil dwelling organisms	polyethylene glycol > 600: No data available
Toxicity to terrestrial flora	polyethylene glycol > 600: No data available
Toxicity for other terrestrial non-mammalian fauna	polyethylene glycol > 600: No data available
12.2 Persistence and degradability	
Biodegradability	polyethylene glycol > 600: Readily biodegradable.; > 70 %; 21 d; aerobic; OECD Test Guideline 301A
12.3 Bioaccumulative potential	
Bioaccumulation	polyethylene glycol > 600: No data available
12.4 Mobility in soil	
Mobility	polyethylene glycol > 600: No data available
12.5 Results of PBT and vPvB assessment	
Results of PBT assessment	polyethylene glycol > 600: Based on available data, the classification criteria are not met.
12.6 Other adverse effects	
General advice	polyethylene glycol > 600: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product	Can be disposed of as a solid waste or burned in a suitable installation subject to 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

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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

NOTIFICATION STATUS

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)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	NZIOC	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	INV (CN)	listed (product or constituents are listed)
Switzerland. Consolidated Inventory	CH INV	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

polyethylene glycol > 600

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

SECTION 16: OTHER INFORMATION

Safety datasheet sections which have been updated:

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- 8. Exposure controls/personal protection
- 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

COMPANY INFORMATION DISTRIBUTOR		
name	BRENNTAG N.V.	BRENNTAG Nederland B.V.
address	Nijverheidslaan 38 8540 Deerlijk	Donker Duyvisweg 44 3316 BM Dordrecht
country	Belgium	The Netherlands
phone number	+32 (0)56 77 69 44	+31 (0)78 65 44 944
fax number	+32 (0)56 77 57 11	+31 (0)78 65 44 919
website	www.brenntag.be	www.brenntag.nl
e-mail	info@brenntag.be	info@brenntag.nl
activities	Distribution and export of chemicals and raw materials	
VAT number	BE0405317567	NL001375945B01
recall procedure available	Yes	
emergency number (24/365)	+32 (0)56 77 69 44	+31 (0)78 6544 944
QUALITY SYSTEMS		
ISO 9001	Yes	Yes
ISO 14001	Yes	Yes
ISO 22000	Yes	Yes
FSSC 22000	Yes	Yes
GMP+ -feed	Yes	Yes
OHSAS18001	-	Yes
ESAD	Yes	Yes
other	-	AEO