

Version: 10.00 Revision Date 2017/03/23

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

1.1 Product identifier

Trade name Acetone EP

REACH No. 01-2119471330-49-0015

Substance name (REACH / CLP) Acetone

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

Use raw material for photochemicals

raw material for cleaning agents and disinfectants raw material for printing inks and printing ink additives

Solvent Industrial use

Uses advised against

1.3 Details of the supplier of the safety data sheet

Company Sasol Chemie GmbH & Co. KG

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 solvents.germany.msds@de.sasol.com

1.4 Emergency telephone number

Emergency telephone number +44 (0)1235 239 670 (Europe, Israel, Africa, Americas)

+44 (0)1235 239 671 (Middle East, Arabic African countries)

+65 3158 1074 (Asia Pacific) +86 10 5100 3039 (China) +27 (0)17 610 4444 (South Africa) +61 (2)8014 4558 (Australia)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids Category 2 Highly flammable liquid and vapour.

Eye irritation Category 2 Causes serious eye irritation.

Specific target organ toxicity - single exposure Category 3 (Central nervous system)

May cause drowsiness or dizziness.



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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

Precautionary statements

P243 Take precautionary measures against static discharge.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Supplemental Hazard Statements

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

Vapours may form explosive mixture with air.

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

acetone; propan-2-one; propanone

content: <= 100 % component type: Active ingredient

EC-No.: 200-662-2 Index-No.: 606-001-00-8 CAS-No.: 67-64-1

REACH No.: 01-2119471330-49-0015

Substance name (REACH / CLP): Acetone Classification (Regulation Flam. Liq. 2

H225 Eye Irrit. H319 (EC) No 1272/2008): STOT SE 3 H336



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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 Take off contaminated clothing and shoes immediately.

If inhaled Bring the person into the fresh air and let rest undisturbed.

In case of skin contact Wash off immediately with plenty of water.

medical advice.

If swallowed Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and

effects, both acute and delayed

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: For specialist advice physicians should contact the Poisons Information

Service.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media Alcohol-resistant foam, Dry powder, Water spray, Carbon dioxide (CO2) in

enclosed spaces

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

When fighting fires in enclosed spaces: caution, danger of suffocation!

Flash back possible over considerable distance. Vapours may form explosive mixtures with air.

5.3 Advice for firefighters

Special protective equipment

for firefighters

Wear self-contained breathing apparatus and protective suit.

Further information Cool containers/tanks with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Do not breathe vapours or spray mist. Avoid contact

with skin, eyes and clothing.

6.2 Environmental precautions

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

Do not allow material to contaminate ground water system.



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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 Ensure adequate ventilation.

Vapours are heavier than air and may spread along floors.

Avoid formation of aerosol.

Advice on protection against

fire and explosion

Do not allow to enter drains (danger of explosion).

Use only explosion-proof equipment.

Take precautionary measures against static discharges. Vapours may form explosive mixtures with air. Keep away from sources of ignition - No smoking.

Temperature class

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, cool and well-ventilated place.

Storage class (TRGS 510) 3: Flammable Liquids

7.3 Specific end use(s)

Specific use(s) Consult the technical guidelines for the use of this substance/mixture.



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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	Тур	Control parameters	Update	Basis
ACETONE	TWA TWA	1,210 mg/m3 500 ppm	2007 2007	EH40 WEL
ACETONE	STEL STEL	3,620 mg/m3 1,500 ppm	2007 2007	EH40 WEL

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

Control parameters / Substance name	Тур	Control parameters	Update	Basis
ACETONE	TWA TWA	1,210 mg/m3 500 ppm	02 2006 02 2006	EU Exposure Limit Values
ACETONE	TWA TWA	1,210 mg/m3 500 ppm	2014 2014	EU SCOELS
ACETONE	STEL STEL	2,420 mg/m3 1,000 ppm	2014 2014	EU SCOELS

DERIVED NO EFFECT LEVEL (DNEL)

Substance name: Acetone			
End Use	Exposure routes	Value	Note
Workers	dermal, Acute/short-term exposure - systemic effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - systemic effects		Not relevant / not applicable
	dermal, Acute/short-term exposure - local effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - local effects	2420 mg/m3	
	dermal, long-term exposure - systemic effects	186 mg/kg Body weight/day	
	Inhalation, long-term exposure - systemic effects	1210 mg/m3	
	dermal, long-term exposure - local effects		Not relevant / not applicable
	Inhalation, long-term exposure - local effects		Not relevant / not applicable
Consumers	dermal, Acute/short-term exposure - systemic effects		Not relevant / not applicable



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Inhalation, Acute/short-term exposure - systemic effects		Not relevant / not applicable
Oral, Acute/short-term exposure - systemic effects		Not relevant / not applicable
dermal, Acute/short-term exposure - local effects		Not relevant / not applicable
 Inhalation, Acute/short-term exposure - local effects		Not relevant / not applicable
dermal, long-term exposure - systemic effects	62 mg/kg Body weight/day	
Inhalation, long-term exposure - systemic effects	200 mg/m3	
Oral, long-term exposure - systemic effects	62 mg/kg Body weight/day	
dermal, long-term exposure - local effects		Not relevant / not applicable
Inhalation, long-term exposure - local effects		Not relevant / not applicable

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: Acetone			
Environmental Compartment	Value	Note	
Fresh water	10.6 mg/l		
Marine water	1.06 mg/l		
intermittent release	21 mg/l		
treatment plant	100 mg/l		
Fresh water sediment	30.4 mg/kg	based on dry weight	
Marine sediment	3.04 mg/kg	based on dry weight	
Soil	29.5 mg/kg	based on dry weight	
food		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 AX filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, AX-P3), in compliance with EN 371.

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 splash protection:



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Material: butyl-rubber

Break through time: >= 240 min Layer thickness: 0.5 mm

unsuitable gloves

Material: Natural rubber/natural latex, Polychloroprene, Fluorinated rubber,

Nitrile rubber/nitrile latex, Polyvinylchloride

Eye protection Tightly fitting safety goggles

Skin and body protection Wear suitable protective equipment.

Hygiene measures Take off all contaminated clothing immediately.

Protective measures Do not breathe vapours or spray mist. Avoid contact with the skin and the eyes.

ENVIRONMENTAL EXPOSURE CONTROLS

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

Do not allow material to contaminate ground water 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 characteristic, acetone-like
Odour Threshold No valid method available

pH Not applicable

Melting point/range -94.7 °C; 1,013 hPa

Boiling point/boiling range 56.05 °C; 1,013 hPa

Flash point -17 °C; 1,013 hPa; closed cup

Evaporation rate No data available

Flammability (solid, gas) not applicable (liquid)

Relative vapour density > 1

Density 0.79 g/cm3; 20 °C

Water solubility 20 °C; completely miscible Partition coefficient: n- log Pow: -0.24; 20 °C

octanol/water

Ignition temperature No data available



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Auto-ignition temperature 465 °C; 1,013 hPa

Viscosity, dynamic 0.32 mPas; 20 °C

Explosive properties Not explosive

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 Vapours may form explosive mixture with air.

10.2 Chemical stability

Note No data available

10.3 Possibility of hazardous reactions

Hazardous reactions May form explosive peroxides.

10.4 Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials to avoid

Materials to avoid Oxidizing agents;

10.6 Hazardous decomposition products

Hazardous decomposition

products

None known.

Thermal decomposition Distils without decomposition at atmospheric pressure.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity acetone; propan-2-one; propanone:

LD50 Rat: > 5,000 mg/kg

(literature value)

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

Acute inhalation toxicity acetone; propan-2-one; propanone:

LC50 Rat: > 20 mg/l; 4 h

(literature value)

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

Acute dermal toxicity acetone; propan-2-one; propanone:

LD50 Rabbit: > 5,000 mg/kg;

(literature value)



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

Skin corrosion/irritation

Skin irritation acetone; propan-2-one; propanone:

Rabbit: not irritating (literature value)

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

Serious eye damage/eye irritation

Eye irritation acetone; propan-2-one; propanone:

Rabbit: irritating; OECD Test Guideline 405

(literature value)

Causes serious eye irritation.

Respiratory or skin sensitisation

Sensitisation acetone; propan-2-one; propanone:

Maximisation Test Guinea pig: not sensitizing

(literature value)

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

Germ cell mutagenicity

Genotoxicity in vitro acetone; propan-2-one; propanone:

In vitro tests did not show mutagenic effects

Genotoxicity in vivo acetone; propan-2-one; propanone:

In vivo tests did not show mutagenic effects

Remarks acetone; propan-2-one; propanone:

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

Carcinogenicity

Carcinogenicity acetone; propan-2-one; propanone:

The substance has been shown to be not genotoxic, therefore it is not expected to

have a carcinogenic potential.

Reproductive toxicity

toxicity

RemarksReproductive

acetone; propan-2-one; propanone:

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

Remarks-Teratogenicity acetone; propan-2-one; propanone:

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

STOT - single exposure

Remarks acetone; propan-2-one; propanone:

Inhalation

May cause drowsiness or dizziness.

STOT - repeated exposure

Remarks acetone; propan-2-one; propanone:

The substance or mixture is not classified as specific target organ toxicant,

repeated exposure.

Repeated dose toxicity acetone; propan-2-one; propanone:

Rat; drinking water; Subchronic toxicity

NOAEL: 900 mg/kg (based on body weight and day)

LOAEL: 1,700 mg/kg (based on body weight and day); OECD Test Guideline 408

Target Organs: spleen, Kidney, blood-forming organs

(literature value)

Aspiration hazard



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Aspiration toxicity acetone; propan-2-one; propanone:

Not applicable

Human experience acetone; propan-2-one; propanone:

Repeated exposure may cause skin dryness or cracking.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish acetone; propan-2-one; propanone:

LC50 (96 h) Oncorhynchus mykiss (rainbow trout): > 100 mg/l; static test

(literature value)

Toxicity to fish - Chronic

toxicity

acetone; propan-2-one; propanone:

No data available

Toxicity to daphnia and other

aquatic invertebrates

acetone; propan-2-one; propanone:

EC50 (48 h) Daphnia pulex (Water flea): > 100 mg/l; static test

(literature value)

Toxicity to daphnia and other aquatic invertebrates - Chronic

toxicity

acetone; propan-2-one; propanone:

EC10 (28 d) Daphnia magna (Water flea): 2,212 mg/l; reproduction rate; flow-

through test; OECD Test Guideline 211; (literature value)

Toxicity to aquatic plants acetone; propan-2-one; propanone:

EC10 (8 d) Microcystis aeruginosa: > 100 mg/l; static test; DIN 38412; (literature

value)

Toxicity to bacteria acetone; propan-2-one; propanone:

EC10 (30 min) activated sludge of a predominantly domestic sewage: 1,000 mg/l;

Respiration inhibition; OECD Test Guideline 209

(literature value)

Toxicity to soil dwelling

organisms

acetone; propan-2-one; propanone:

LC50 (48 h) Eisenia foetida: 0.1 - 1 mg/cm2; mortality; OECD Test Guideline 207

(literature value)

Toxicity to terrestrial flora acetone; propan-2-one; propanone:

study scientifically unjustified

Justification:

Readily biodegradable. (literature value)

Toxicity for other terrestrial

non-mammalian fauna

acetone; propan-2-one; propanone:

study scientifically unjustified

Justification:

Readily biodegradable. (literature value)

12.2 Persistence and degradability

Biodegradability acetone; propan-2-one; propanone:

Readily biodegradable.; > 60 %; 28 d; OECD Test Guideline 301B

(literature value)

12.3 Bioaccumulative potential

Bioaccumulation acetone; propan-2-one; propanone:

Bioconcentration factor (BCF): 3; calculated No bioaccumulation is to be expected (log Pow <= 4).

(literature value)



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12.4 Mobility in soil

Mobility acetone; propan-2-one; propanone:

Adsorption/Soil Highly mobile in soils low potential for absorption

(literature value)

12.5 Results of PBT and vPvB assessment

Results of PBT assessment acetone; propan-2-one; propanone:

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

12.6 Other adverse effects

General advice acetone; propan-2-one; propanone:

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Following pre-treatment and observing the regulations for hazardous wastes, it

must be taken to a permitted hazardous wastes landfill or hazardous wastes

incinerator.

Contaminated packaging Contaminated packaging should be emptied optimally and after being suitably

cleaned returned for re-use.

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.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR 1090
RID 1090
ADN 1090
IMDG 1090
ICAO/IATA 1090

14.2 Proper shipping name

ADR ACETONE
RID ACETONE
ADN ACETONE
IMDG ACETONE
ICAO/IATA ACETONE

14.3 Transport hazard class

ADR 3
RID 3
ADN 3



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IMDG 3
ICAO/IATA 3

14.4 Packing group

ADR II
RID II
ADN II
IMDG II
ICAO/IATA II

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

ADR Hazard Identification Number 33
Labels 3
Tunnel restriction code (D/E)

IMDG Labels 3

EmS Number 1 F-E EmS Number 2 S-D

ICAO/IATA Labels 3

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:: FLAMMABLE LIQUIDS; P5c

Qualifying quantity 1: 5,000 t; Qualifying quantity 2: 50,000 t;



NOTIFICATION STATUS

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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

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

Acetone

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

SECTION 16: OTHER INFORMATION

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

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Further information: This safety datasheet only contains information relating to safety and does not

replace any product information or product specification.

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.

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



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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 Derived No-Effect Level DNEL DSL Domestic Substances List EC... Effect concentration ... %

ENCS Existing Notified Chemical Substances (Japan)

EWC European Waste Catalogue IATA International Air Transport Association Intermediate Bulk Container IBC

International Civil Aviation Organization ICAO IMDG International Maritime Dangerous Goods IMO International Maritime Organization ISHL Industrial Safety and Health Law (Japan) ISO International Organization for Standardization International Union of Pure and Applied Chemistry IUAPC

KECI Korea Existing Chemicals Inventory

Lethal Concentration, ...% LC... 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 Predicted No-Effect Concentration **PNEC**

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Règlement concernant le transport international ferroviaire de marchandises dangereuses

TG TRGS

Test Guideline 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.

http://www.sasolgermany.de/fileadmin/doc/productsafety/Annex/000000015946_EN_01.pdf