

Version: 1.00 Revision Date 19.03.2020

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

1.1 Product identifier

Trade name LIALET 111-10

Substance name (REACH / CLP) Undecanol, branched and linear, ethoxylated (>= 2.5 EO)(CAS 127036-24-2)

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

Use raw material for washing and cleaning agents

Industrial use

Uses advised against

1.3 Details of the supplier of the safety data sheet

Company Sloveca, Sasol Slovakia, spol. s r.o.

Mostová 2

811 02 Bratislava Slovak Republic

Telephone: +421 2 54430219 Telefax: +421 2 54430315

Information (Product safety): Telephone: +421 46 546 1204

Telefax: +421 46 546 1144

E-mail address msds-info.italy@it.sasol.com

1.4 Emergency telephone number

Emergency telephone number +421 902 899981; +421 25 477 4166 National Toxicological Information Centre

(24 hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity Category 4 (Oral) Harmful if swallowed.

Serious eye damage Category 1 Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word Danger

Hazard statements

H302 Harmful if swallowed.



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H318 Causes serious eye damage.

Precautionary statements

P264 Wash face, hands and any exposed skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

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

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

P330 Rinse mouth.

2.3 Other hazards

None known.

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

Undecanol, branched and linear, ethoxylated (>= 2.5 EO)

content: >= 90 - <= 100 % component type: Active ingredient

EC-No.: 603-182-5 Index-No.: CAS-No.: 127036-24-2

REACH No.: Not relevant (polymer)

Substance name (REACH / CLP): Undecanol, branched and linear, ethoxylated (>= 2.5 EO)(CAS: 127036-24-2)

Classification (Regulation (EC) No 1272/2008): Acute Tox. 4 (Oral) H302 Eye Dam. 1 H318

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).

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 Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and Symptoms: No information available.



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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: No information available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

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

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

Use mechanical handling equipment. The material taken up must be disposed of in Methods for cleaning up

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

Provide sufficient air exchange and/or exhaust in work rooms.

Keep away from heat and sources of ignition.

Fire-fighting class B: Fires involving liquids or liquid containing substances. Also includes substances

which become liquid at elevated temperatures.



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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas

Keep tightly closed in a dry and cool place.

and containers

Storage class (TRGS 510) 11: Combustible Solids

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: Undecanol, branched and linear, ethoxylated (>= 2.5 EO)(CAS: 127036-24-2)

No data available

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: Undecanol, branched and linear, ethoxylated (>= 2.5 EO)(CAS: 127036-24-2)

No data available

8.2 Exposure controls

ENGINEERING MEASURES

If possible, use material transfer/filling, metering and blending plants that are closed.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection 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. No personal respiratory protective equipment normally

required.

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



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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 Protective suit

Hygiene measures Avoid contact with eyes. General industrial hygiene practice. 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 eyes. Wear suitable gloves and eye/face protection.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice Avoid subsoil penetration.

Water 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 solid; 25 °C; 1.013 hPa

Form pasty
Colour white

Odour characteristic

Odour Threshold No valid method available.

pH 5 - 7; 5 % active substance; 25 °C; STN EN 1262

Pour point 15 - 20 °C; 1.013 hPa; STN 65 6072

Boiling Point No data available

Flash point > 125 °C; 1.013 hPa; ASTM D 93

Evaporation rate No data available Flammability (solid, gas) No data available

Lower explosion limit No data available
Upper explosion limit No data available



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Vapour pressure No data available
Relative vapour density No data available

Density ca.0,996 g/cm3; 50 °C; 1,013 hPa; STN EN ISO 12185

Not applicable

Relative density No data available

Bulk density No data available

Water solubility 25 °C; 1.013 hPa; estimated; soluble

Partition coefficient: n-

octanol/water Justification: surface-active substance

 Ignition temperature
 No data available

 Auto-ignition temperature
 not auto-flammable

Viscosity, dynamic ca. 26,0 mPas; 50 °C; STN EN ISO 3104
Viscosity, kinematic ca. 26,2 mm2/s; 50 °C; (calculated)

Explosive properties not expected based on structure and functional groups

Oxidizing properties not expected based on structure and functional groups

9.2 Other data

None known.

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 normally.

Thermal decomposition Hazardous decomposition products formed under fire conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Undecanol, branched and linear, ethoxylated (>= 2.5 EO):



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The data in this chapter are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Test substance: Alcohols, C9-11, branched, ethoxylated

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

LD50 Rat: > 300 - 2.000 mg/kg

Category approach

own test results/literature values

Harmful if swallowed.

Acute inhalation toxicity Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

No data available

Acute dermal toxicity Undecanol, branched and linear, 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 Undecanol, branched and linear, 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 Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Rabbit: Irreversible effects on the eye own test results/literature values

Category approach

Causes serious eye damage.

Respiratory or skin sensitisation

Sensitisation Undecanol, branched and linear, 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 Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

In vitro tests did not show mutagenic effects

Category approach

own test results/literature values

Genotoxicity in vivo Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

In vivo tests did not show mutagenic effects

Category approach (literature value)

Remarks Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

Carcinogenicity

Carcinogenicity Undecanol, branched and linear, 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)



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> Remarks Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

Reproductive toxicity

Reproductive toxicity Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Animal testing did not show any effects on fertility.

Category approach (literature value)

RemarksReproductive

toxicity

Undecanol, branched and linear, ethoxylated (>= 2.5 EO): Based on available data, the classification criteria are not met.

Teratogenicity Undecanol, branched and linear, ethoxylated (>= 2.5 EO): Did not show teratogenic effects in animal experiments.

Category approach (literature value)

Remarks-Teratogenicity Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

STOT - single exposure

Undecanol, branched and linear, ethoxylated (>= 2.5 EO): Remarks

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

exposure.

STOT - repeated exposure

Remarks Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

repeated exposure.

Repeated dose toxicity Undecanol, branched and linear, 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 Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Not applicable

Toxicological information Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Toxicokinetics Category approach

The substance is expected to be rapidly absorbed and excreted.

(literature value)

SECTION 12: ECOLOGICAL INFORMATION

Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

The data in this chapter are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Test substance: Alcohols, C9-11, branched, ethoxylated

12.1 Toxicity



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Toxicity to fish Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

LC50 (96 h) Cyprinus carpio (Carp): > 10 - 100 mg/l; flow-through test; OECD Test

Guideline 203

own test results/literature values

Category approach

Toxicity to fish - Chronic

toxicity

Undecanol, branched and linear, ethoxylated (>= 2.5 EO): NOEC Fish: > 1 - 10 mg/l

NOEC Fish: > 1 - 10 mg/l own test results/literature values

Category approach

Toxicity to daphnia and other

aquatic invertebrates

Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

EC50 (48 h) Daphnia magna (Water flea): > 10 - 100 mg/l; static test; OECD Test

Guideline 202

own test results/literature values

Category approach

Toxicity to daphnia and other aquatic invertebrates - Chronic

toxicity

Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

NOEC (21 d) Daphnia (water flea): > 1 - 10 mg/l

own test results/literature values Category approach

Toxicity to aquatic plants Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

EC10 (72 h) algae: > 1 - 10 mg/l; OECD Test Guideline 201; own test

results/literature values Category approach

Toxicity to bacteria Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

EC50 activated sludge: 140 mg/l; Respiration inhibition

Category approach (literature value)

Toxicity to soil dwelling

organisms

Undecanol, branched and linear, ethoxylated (>= 2.5 EO): NOEC Eisenia foetida: 220 mg/kg; reproduction rate; artificial soil

Category approach (literature value)

Toxicity to terrestrial flora Undecanol, branched and linear, 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

Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

No data available

12.2 Persistence and degradability

Biodegradability Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

own test results/literature values

Category approach

Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Biodegradable; > 60 %; anaerobic; OECD 311 or equivalent test method

Category approach

12.3 Bioaccumulative potential

Bioaccumulation Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Bioaccumulation is unlikely.

(literature value)

12.4 Mobility in soil

Mobility Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

Adsorption/Soil; Koc: 4246 - 11246; QSAR

(literature value)

immobile

strong adsorption to soil



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12.5 Results of PBT and vPvB assessment

Results of PBT assessment Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

12.6 Other adverse effects

General advice Undecanol, branched and linear, ethoxylated (>= 2.5 EO):

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

The waste code must be determined in agreement with the regional waste disposal authority or company. 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 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



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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

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:: 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.



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NO.	ΓIFIC	ATIC	ON S	STA:	TUS

Switzerland. Consolidated Inventory (based on EU-EINECS and EU-NLP)	CH INV	not listed (product or constituents are not 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

Undecanol, branched and linear, ethoxylated (>= 2.5 EO)(CAS: 127036-24-2)

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.

H302 Harmful if swallowed. H318 Causes serious eye damage.

Safety datasheet sections which have been updated:

- 3. Composition/information on ingredients
- 15. Regulatory information
- 16. Other 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,



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> 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

Regulation on Classification, Labelling and Packaging of Substances and Mixtures CLP

Deutsches Institut für Normung DIN DNEL Derived No-Effect Level DSL Domestic Substances List FC.

Effect concentration ... % Existing Notified Chemical Substances (Japan) ENCS European Waste Catalogue EWC 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

KFCI 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

PNFC Predicted No-Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Règlement concernant le transport international ferroviaire de marchandises dangereuses

TG **TRGS**

Technische Regeln für Gefahrstoffe **TSCA** Toxic Substances Control Act very persistent, very bioaccumulative vPvB WGK Wassergefährdungsklasse