

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**ECE-77 detergent DEK**

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

#### 1.2.1 Relevant uses

Detergent

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

#### Company

DEK GmbH  
Elly-Heuss-Knapp-Platz 4  
53844 Troisdorf / GERMANY  
Phone +49-228-976 624 85

Homepage [www.farbechtheit.info](http://www.farbechtheit.info)  
E-mail [info@farbechtheit.info](mailto:info@farbechtheit.info)

#### Address enquiries to

#### Technical information

[info@farbechtheit.info](mailto:info@farbechtheit.info)

### 1.4 Emergency telephone number

#### Advisory body

+49 (0)228-19240 (24h) (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Eye Dam. 1: H318 Causes serious eye damage.  
Skin Irrit. 2: H315 Causes skin irritation.

### 2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

#### Hazard pictograms



#### Signal word

DANGER

#### Contains:

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

#### Hazard statements

H318 Causes serious eye damage.  
H315 Causes skin irritation.

#### Precautionary statements

P280 Wear protective gloves / protective clothing / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER / doctor.

#### Cleaner, 648/2004/CE, contains:

5 - <15% anionic surfactant  
>=30% phosphates  
< 5% soap  
< 5% non-ionic surfactants  
< 5% EDTA

## 2.3 Other hazards

### Environmental hazards

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.

### Other hazards

Further hazards were not determined with the current level of knowledge.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
3 - < 10	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide EINECS/ELINCS: 932-051-8, Reg-No.: 01-2119565112-48-XXXX GHS/CLP: Eye Dam. 1: H318 - Skin Irrit. 2: H315 - Aquatic Chronic 3: H412
1 - < 10	Silicic acid, sodium salt (MV >2,6-<3,2) CAS: 1344-09-8, EINECS/ELINCS: 215-687-4, Reg-No.: 01-2119448725-31-XXXX GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - STOT SE 3: H335
3 - < 5	Isotridecanol,ethoxylated (>=2.5 EO) CAS: 69011-36-5, EINECS/ELINCS: 931-138-8 GHS/CLP: Eye Dam. 1: H318 - Acute Tox. 4: H302

### Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.  
For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately and dispose of safely.

#### Inhalation

Seek medical advice immediately.  
Ensure supply of fresh air.

#### Skin contact

When in contact with the skin, clean with soap and water.  
In the event of symptoms seek medical treatment.

#### Eye contact

Seek medical advice immediately.  
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Shield unaffected eye.

#### Ingestion

Consult a doctor immediately.  
Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.  
Forward this sheet to your doctor.

**SECTION 5: Fire-fighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

**Extinguishing media that must not be used**

Full water jet.

**5.2 Special hazards arising from the substance or mixture**

Risk of formation of toxic pyrolysis products.

**5.3 Advice for firefighters**

Use self-contained breathing apparatus.  
Do not inhale explosion and/or combustion gases.  
Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.  
Avoid dust formation.  
Wear suitable protective equipment. For personal protection see SECTION 8.  
Use breathing apparatus if exposed to dust.

**6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**6.3 Methods and material for containment and cleaning up**

Avoid raising dust.  
Take up mechanically.  
Dispose of absorbed material in accordance within the regulations.

**6.4 Reference to other sections**

See SECTION 8+13

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Use only in well-ventilated areas.  
Avoid the formation and deposition of dust.  
Provide vacuuming if dust raised.  
Avoid contact with eyes and skin. Use personal protective equipment.

Take off contaminated clothing and wash before reuse.  
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.  
Do not eat, drink, smoke or take drugs at work.  
Use barrier skin cream.

**7.2 Conditions for safe storage, including any incompatibilities**

Keep only in original container.  
Provide alkali-resistant floor.  
  
Do not store together with acids.  
  
Keep container in a well-ventilated place.  
Keep container tightly closed.  
Keep in a cool place. Store in a dry place.  
The product is hygroscopic.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

Ingredients with occupational  
exposure limits to be monitored (GB)

Substance
Sodium sulphate
CAS: 7757-82-6, EINECS/ELINCS: 231-820-9
Long-term exposure: 6 mg/m <sup>3</sup>

#### DNEL

Substance
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide
Industrial, inhalative, Long-term - systemic effects, 12 mg/m <sup>3</sup> ,
Industrial, dermal, Long-term - systemic effects, 170 mg/kg,
general population, oral, Long-term - systemic effects, 0,85 mg/kg,
general population, inhalative, Long-term - systemic effects, 3 mg/m <sup>3</sup> ,
general population, dermal, Long-term - systemic effects, 85 mg/kg,
Silicic acid, sodium salt (MV >2,6-<3,2), CAS: 1344-09-8
Industrial, dermal, Long-term - systemic effects, 1,59 mg/kg bw/day,
Industrial, inhalative, Long-term - systemic effects, 5,61 mg/m <sup>3</sup> ,
general population, oral, Long-term - systemic effects, 0,8 mg/kg bw/day,
general population, dermal, Long-term - systemic effects, 0,8 mg/kg bw/day,
general population, inhalative, Long-term - systemic effects, 1,38 mg/m <sup>3</sup> ,

#### PNEC

Substance
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide
soil, 35 mg/kg,
sediment (seawater), 8,1 mg/kg,
sediment (freshwater), 8,1 mg/kg,
sewage treatment plants (STP), 5,6 mg/l,
seawater, 0,0268 mg/l,
freshwater, 0,268 mg/l,
Silicic acid, sodium salt (MV >2,6-<3,2), CAS: 1344-09-8
sewage treatment plants (STP), 348 mg/L,
seawater, 1 mg/L,
freshwater, 7,5 mg/L,

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. Pay attention to dust limit value (ACGIH-2011: 10 mg/m <sup>3</sup> particle inhalable; 3 mg/m <sup>3</sup> particle respirable). Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
<b>Eye protection</b>	Tightly fitting goggles. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: > 0,4 mm: Butyl rubber, >480 min (EN 374-1/-2/-3). In splash contact: > 0,4 mm: Butyl rubber, >480 min (EN 374-1/-2/-3).
<b>Skin protection</b>	Alkali-resistant protective clothing (EN 340)
<b>Other</b>	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin. Do not inhale dust.
<b>Respiratory protection</b>	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter P2. (DIN EN 143)
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	Comply with applicable environmental regulations limiting discharge to air, water and soil.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	powder
Color	white
Odor	mild
Odour threshold	not applicable
pH-value	alkaline
pH-value [1%]	No information available.
Boiling point [°C]	No information available.
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not applicable
Density [g/ml]	No information available.
Bulk density [kg/m³]	No information available.
Solubility in water	soluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

### 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Reactions with acids.  
Reactions with oxidizing agents.

### 10.4 Conditions to avoid

Contact with moisture.

### 10.5 Incompatible materials

See SECTION 10.3.

## 10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Substance
Isotridecanol,ethoxylated ( $\geq 2.5$ EO), CAS: 69011-36-5
LD50, oral, Rat, > 300 - 2000 mg/kg,
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide
LD50, oral, Rat, 2000-5000 mg/kg (OECD 401),
NOAEL, oral, Rat, 85 mg/kg,
LOAEL, oral, Rat, 145 mg/kg,
Silicic acid, sodium salt (MV >2,6-<3,2), CAS: 1344-09-8
LD50, oral, Rat, > 2000 mg/kg,

#### Acute dermal toxicity

Substance
Isotridecanol,ethoxylated ( $\geq 2.5$ EO), CAS: 69011-36-5
LD50, dermal, Rabbit, > 2000 mg/kg,
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide
LD50, dermal, Rat, > 2000 mg/kg (OECD 402),
NOAEL, dermal, mouse, 440 mg/kg (OECD 411),
Silicic acid, sodium salt (MV >2,6-<3,2), CAS: 1344-09-8
LD50, dermal, Rabbit, > 5000 mg/kg,

#### Acute inhalational toxicity

Serious eye damage/irritation	Risk of serious damage to eyes. Calculation method
Skin corrosion/irritation	Irritant Calculation method
Respiratory or skin sensitisation	Does not contain a relevant substance that meets the classification criteria.
Specific target organ toxicity — single exposure	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — repeated exposure	Does not contain a relevant substance that meets the classification criteria.
Mutagenicity	Does not contain a relevant substance that meets the classification criteria.
Reproduction toxicity	Does not contain a relevant substance that meets the classification criteria.
Carcinogenicity	Does not contain a relevant substance that meets the classification criteria.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	

Toxicological data of complete product are not available.  
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
Isotridecanol,ethoxylated ( $\geq 2.5$ EO), CAS: 69011-36-5
LC50, (96h), Cyprinus carpio, > 1 - 10 mg/l (OECD 203),
EC50, (72h), Desmodesmus subspicatus, > 1 - 10 mg/l (OECD 201),
EC50, (48h), Daphnia magna, > 1 - 10 mg/l (OECD 202),
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide
LC50, (96h), Cyprinus carpio, > 1 - 10 mg/l (OECD 203),
EC50, (48h), Cyprinus carpio, > 1 - 10 mg/l (OECD 202),
EC50, Pseudomonas putida, 63 mg/l/17h (ISO 10712),
NOEC, (21d), Daphnia magna, > 1 - 10 mg/l (OECD 211),
NOEC, (72h), Oncorhynchus mykiss, > 0,1 - 1 mg/l,
ErC50, (72h), Scenedesmus subspicatus, > 10 - 100 mg/l (OECD 201),
Silicic acid, sodium salt (MV >2,6-<3,2), CAS: 1344-09-8
LC50, fish, > 100 mg/l (ISO 7346/2 (semistatic)),
EC50, Daphnia sp., > 100 mg/l,
EC50, Bacteria, > 100 mg/l (DIN 38412),
EC50, Algae, > 100 mg/l (OECD 201),

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	No information available.
<b>Behaviour in sewage plant</b>	The product can cause foaming in sewage treatment plants.
<b>Biological degradability</b>	The surfactants contained in this preparation comply 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.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Endocrine disrupting properties

No information available.

### 12.7 Other adverse effects

Ecological data of complete product are not available.

Do not discharge product unmonitored into the environment or into the drainage.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.



## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

Dispose of as hazardous waste.  
 Coordinate disposal with the disposal contractor/authorities if necessary.

**Waste no. (recommended)** 070608\*  
 200129\*

#### Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.  
 Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.  
 Uncontaminated packaging may be taken for recycling.

**Waste no. (recommended)** 150110\* packaging containing residues of or contaminated by hazardous substances

## SECTION 14: Transport information

### 14.1 UN number

**Transport by land according to ADR/RID** not applicable

**Inland navigation (ADN)** not applicable

**Marine transport in accordance with IMDG** not applicable

**Air transport in accordance with IATA** not applicable

### 14.2 UN proper shipping name

**Transport by land according to ADR/RID** NO DANGEROUS GOODS

**Inland navigation (ADN)** NO DANGEROUS GOODS

**Marine transport in accordance with IMDG** NOT CLASSIFIED AS "DANGEROUS GOODS"

**Air transport in accordance with IATA** NOT CLASSIFIED AS "DANGEROUS GOODS"

### 14.3 Transport hazard class(es)

**Transport by land according to ADR/RID** not applicable

**Inland navigation (ADN)** not applicable

**Marine transport in accordance with IMDG** not applicable

**Air transport in accordance with IATA** not applicable

#### 14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

#### 14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

**EEC-REGULATIONS** 2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014

**TRANSPORT-REGULATIONS** ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)

**NATIONAL REGULATIONS (GB):** EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions for people Observe employment restrictions for young people.  
Observe employment restrictions for mothers-to-be and nursing mothers.

- VOC (2010/75/CE) not applicable

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

### SECTION 16: Other information

#### 16.1 Hazard statements (SECTION 3)

H302 Harmful if swallowed.  
H335 May cause respiratory irritation.  
H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long lasting effects.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.

## 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 ATE = acute toxicity estimate  
 CAS = Chemical Abstracts Service  
 CLP = Classification, Labelling and Packaging  
 DMEL = Derived Minimum Effect Level  
 DNEL = Derived No Effect Level  
 EC50 = Median effective concentration  
 ECB = European Chemicals Bureau  
 EEC = European Economic Community  
 EINECS = European Inventory of Existing Commercial Chemical Substances  
 EL50 = Median effective loading  
 ELINCS = European List of Notified Chemical Substances  
 EmS = Emergency Schedules  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC50 = Inhibition concentration, 50%  
 IMDG = International Maritime Code for Dangerous Goods  
 IUCLID = International Uniform Chemical Information Database  
 IVIS = In vitro irritation score  
 LC50 = Lethal concentration, 50%  
 LD50 = Median lethal dose  
 LC0 = lethal concentration, 0%  
 LOAEL = lowest-observed-adverse-effect level  
 LL50 = Median lethal loading  
 LQ = Limited Quantities  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 NOAEL = No Observed Adverse Effect Level  
 NOEC = No Observed Effect Concentration  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 STP = Sewage Treatment Plant  
 TLV®/TWA = Threshold limit value – time-weighted average  
 TLV®STEL = Threshold limit value – short-time exposure limit  
 VOC = Volatile Organic Compounds  
 vPvB = very Persistent and very Bioaccumulative

## 16.3 Other information

### Classification procedure

Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)  
 Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)

### Modified position

SECTION 2 been added: 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.

SECTION 7 been added: Avoid contact with eyes and skin. Use personal protective equipment.

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.

SECTION 8 deleted: Respiratory protection in the case of dust formation.