



# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.03.2015

Revision: 24.04.2015

Trade name: REAGENT DG

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Alcohol ethoxylate

- **Hazard statements**

H302 Harmful if swallowed.

H330 Fatal if inhaled.

H314 Causes severe skin burns and eye damage.

H351 Suspected of causing cancer.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**

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

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 or doctor/physician.

P320 Specific treatment is urgent (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**

T Toxic

N Dangerous for the environment

- **Hazard-determining components of labelling:**

Solvent naphtha (petroleum), heavy arom.

Quaternaire ammoniumverbindungen

Benzenesulfonic acid, mono-C10-14-alkylderivs.

- **Risk phrases:**

22 Harmful if swallowed.

23 Toxic by inhalation.

34 Causes burns.

40 Limited evidence of a carcinogenic effect.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

4 Keep away from living quarters.

9 Keep container in a well-ventilated place.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

57 Use appropriate container to avoid environmental contamination.

### 3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

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Hydrocarbons, liquid, aromatic Xn R40-65; N R51/53 R66-67 GHS08 Carc. 2, H351; Asp. Tox. 1, H304; GHS09 Aquatic Chronic 2, H411; GHS07 STOT SE 3, H336	25-50 %
anionic surfactants C R34; Xn R22 GHS05 Skin Corr. 1B, H314; GHS07 Acute Tox. 4, H302	25-50 %
non-ionic surfactants Xn R22; Xi R41 GHS05 Eye Dam. 1, H318; GHS07 Acute Tox. 4, H302	10-25 %
cationic surfactants T+ R26; Xn R21/22 GHS06 Acute Tox. 3, H301; Acute Tox. 1, H330; Acute Tox. 4, H312	2.5-10 %

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

Seek immediate medical advice.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

Seek immediate medical advice.

· **After swallowing:**

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

## 5 Firefighting measures

· **Suitable extinguishing agents:**

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Protective equipment:** Mount respiratory protective device.

## 6 Accidental release measures

· **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

· **Measures for environmental protection:**

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

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- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Dilute with plenty water.  
Ensure adequate ventilation.  
Dispose of the material collected according to regulations.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Store in cool, dry place in tightly closed receptacles.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**  
Protective gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**  
Safety glasses  
Tightly sealed goggles
- **Body protection:** Protective work clothing

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## 9 Physical and chemical properties

### · General Information

#### · Appearance:

Form:	Liquid
Colour:	According to product specification
Odour:	Aromatic

### · Change in condition

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: 100°C

· Flash point: 62°C

· Ignition temperature: 100°C

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

### · Explosion limits:

Lower:	0.6 Vol %
Upper:	7.0 Vol %

· Vapour pressure at 20°C: 10 hPa

· Density at 20°C: 0.96 g/cm<sup>3</sup>

· Solubility in / Miscibility with water: Fully miscible.

· pH-value at 20°C: < 3

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

### · Acute toxicity:

#### · LD/LC50 values relevant for classification:

**68439-46-3 Alcohol ethoxylate**

Oral	LD50	1400 mg/kg (rat)
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**61789-71-7 Quaternaire ammoniumverbindungen**

Oral	LD50	200-2000 mg/kg (rat)
	Ames test	Not mutagenic (-)

### · Primary irritant effect:

- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.

### · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic  
Harmful

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Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## 12 Ecological information

- **Ecotoxicological effects:**

- **Aquatic toxicity:**

**64742-94-5 Solvent naphtha (petroleum), heavy arom.**

% Biodegradability	58%, 28d (-)
Biodegradability	difficult (-)
LC50/ 96 h	1-10 mg/l (fish)

**68439-46-3 Alcohol ethoxylate**

EC50/ 72 h	>1 mg/l (fish)
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**61789-71-7 Quaternaire ammoniumverbindungen**

EC50/ 48 h	<1 mg/l (daphnia)
EC50/ 72 h	<1 mg/l (algae)
LC50/ 96 h	1 - 10 mg/l (fish)

- **Remark:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

## 13 Disposal considerations

- **Product:**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

- **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** 8 (C9) Corrosive substances.

- **Danger code (Kemler):** 80

- **UN-Number:** 1760

- **Packaging group:** III

- **Hazard label** 8

- **Special marking:** Symbol (fish and tree)

- **Description of goods:** 1760 CORROSIVE LIQUID, N.O.S. (Quaternaire ammoniumverbindungen)

- **Tunnel restriction code** E

- **Maritime transport IMDG:**

- **IMDG Class:** 8

- **UN Number:** 1760

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- **Label** 8
- **Packaging group:** III
- **Marine pollutant:** Yes  
Symbol (fish and tree)
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Quaternaire ammoniumverbindungen)

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 8
- **UN/ID Number:** 1760
- **Label** 8
- **Packaging group:** III
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Quaternaire ammoniumverbindungen)

- **UN "Model Regulation":** UN1760, CORROSIVE LIQUID, N.O.S., 8, III

## 15 Regulatory information

- **Labelling according to Regulation (EC) No 1272/2008**
- **Hazard pictograms** GHS05, GHS06, GHS08, GHS09
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Benzenesulfonic acid, mono-C10-14-alkylderivs.  
Solvent naphtha (petroleum), heavy arom.  
Quaternaire ammoniumverbindungen  
Alcohol ethoxylate
- **Hazard statements**  
H302 Harmful if swallowed.  
H330 Fatal if inhaled.  
H314 Causes severe skin burns and eye damage.  
H351 Suspected of causing cancer.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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 or doctor/physician.  
P320 Specific treatment is urgent (see on this label).  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**  
T Toxic  
N Dangerous for the environment
- **Hazard-determining components of labelling:**  
Solvent naphtha (petroleum), heavy arom.  
Quaternaire ammoniumverbindungen  
Benzenesulfonic acid, mono-C10-14-alkylderivs.
- **Risk phrases:**  
22 Harmful if swallowed.  
23 Toxic by inhalation.  
34 Causes burns.

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- 40 Limited evidence of a carcinogenic effect.  
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
    - 4 Keep away from living quarters.
    - 9 Keep container in a well-ventilated place.
    - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
    - 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
    - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
    - 57 Use appropriate container to avoid environmental contamination.
  - **Chemical safety assessment** A Chemical Safety Assessment has not been carried out.

• **National regulations:**• **Technical instructions (air):**

Class	Share in %
1	2,5-10

- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Relevant phrases**

- H301 Toxic if swallowed.  
 H302 Harmful if swallowed.  
 H304 May be fatal if swallowed and enters airways.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H318 Causes serious eye damage.  
 H330 Fatal if inhaled.  
 H336 May cause drowsiness or dizziness.  
 H351 Suspected of causing cancer.  
 H411 Toxic to aquatic life with long lasting effects.
- R21/22 Harmful in contact with skin and if swallowed.  
 R22 Harmful if swallowed.  
 R26 Very toxic by inhalation.  
 R34 Causes burns.  
 R40 Limited evidence of a carcinogenic effect.  
 R41 Risk of serious damage to eyes.  
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R65 Harmful: may cause lung damage if swallowed.  
 R66 Repeated exposure may cause skin dryness or cracking.  
 R67 Vapours may cause drowsiness and dizziness.

• **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
 ICAO: International Civil Aviation Organization  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent

- **\* Data compared to the previous version altered.**