



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 24.03.2014

Version: 6

Revision: 24.03.2014

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

1.1 Product identifier

Trade name: **KDS NR 24**

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

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC35 Washing and cleaning products (including solvent based products)

Process category

PROC19 Hand-mixing with intimate contact and only PPE available

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

Environmental release category

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8d Wide dispersive outdoor use of processing aids in open systems

Application of the substance / the mixture Alkaline cleaner/ detergent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

ZEP UK; Forward Chemicals Limited

P.O. Box 12

Tanhouse Lane

Widnes Cheshire

WA8 ORD

@: salesandservice@forwardchem.com

Tel: 0151-422 1000

Fax: 0151-422 1011

ZEP Industries BV

Vierlinghweg 30

4612 PN Bergen op Zoom

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Tel: (NL) + 31 164 250 100 (B) + 32 2 347 0117

Fax: (NL) + 31 164 266 710 (B) + 32 2 347 1395

@: sales@zepbenelux.com

ZEP Italy s.r.l.

Via Netunese Km. 25.000

IT-040111 Aprilia (LT)

Tel: +39.06926691

Fax: +39.06.92747061

@: info@zepitalia.it

Sito: www.zepuurope.com

Further information obtainable from:

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

1.4 Emergency telephone number:

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

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IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

C; Corrosive

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R34: Causes burns.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05

GHS09

Signal word Danger**Hazard-determining components of labelling:**

sodium hypochlorite, solution

Hazard statements

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): 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/doctor/...

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

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

2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 7681-52-9 EINECS: 231-668-3 Reg.nr.: 01-2119488154-34-XXXX	sodium hypochlorite, solution C R34 N R50 R31 Skin Corr. 1B, H314 Aquatic Acute 1, H400	2.5-5%
CAS: 1344-09-8 EINECS: 215-687-4 Reg.nr.: 01-2119448725-31-xxxx	Silicic acid, sodium salt Xi R36/38 Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-5%
CAS: 85711-69-9 EINECS: 288-330-3	Sulfonic acids, C13-17-sec-alkanesulfonic, sodium salts Xi R38-41 Eye Dam. 1, H318 Skin Irrit. 2, H315	2.5-5%
CAS: 1300-72-7 EINECS: 215-090-9 Reg.nr.: 01-2119513350-56	sodium xylene sulphonate Xi R36/38 Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-5%

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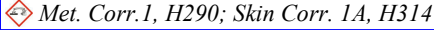

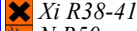

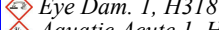
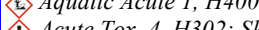
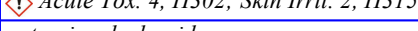


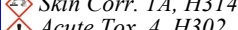
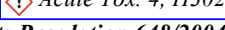
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CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27-xxxx	sodium hydroxide  C R35 	1-2.5%
CAS: 68955-55-5 EC number: 931-341-1 Reg.nr.: 01-2119489396-21-xxxx	Amines, C12-18 alkyldimethyl, N-oxides      	1-2.5%
CAS: 1310-58-3 EINECS: 215-181-3 Reg.nr.: 01-2119487136-33	potassium hydroxide    	1-2.5%

· **Ingredients according to Detergents Regulation 648/2004/EC**
For the wording of the listed risk phrases refer to section 16.

Anionic surfactants	5 - 15%
Cationic surfactants, Polycarboxylates	< 5%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
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.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Use only in well ventilated areas.

· **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

1310-73-2 sodium hydroxide (1-2.5%)

WEL (Great Britain) Short-term value: 2 mg/m³

1310-58-3 potassium hydroxide (1-2.5%)

WEL (Great Britain) Short-term value: 2 mg/m³

· DNELs

7681-52-9 sodium hypochlorite, solution

Oral	DNEL Long term-systemic	0.26 mg/kg human/day (consumer)
Inhalative	DNEL Acute-local mg/m ³	3.1 mg/m ³ (worker)
	DNEL Acute-systemic mg/m ³	3.1 mg/m ³ (worker)
	DNEL Long term local mg/m ³	1.55 mg/m ³ (consumer)
		1.55 mg/m ³ (worker)
	DNEL Long term-systemic mg/m ³	1.55 mg/m ³ (consumer)
		1.55 mg/m ³ (worker)

1310-73-2 sodium hydroxide

Inhalative	DNEL Long term local mg/m ³	1 mg/m ³ (consumer)
		1 mg/m ³ (worker)

68955-55-5 Amines, C12-18 alkyldimethyl, N-oxides

Oral	DNEL Long term-systemic	0.44 mg/kg human/day (consumer)
Dermal	DNEL Long term-systemic	5.5 mg/kg human/day (consumer)
		11 mg/kg human/day (worker)
Inhalative	DNEL Long term-systemic mg/m ³	3.8 mg/m ³ (consumer)
		15.5 mg/m ³ (worker)

1310-58-3 potassium hydroxide

Inhalative	DNEL Long term local mg/m ³	1 mg/m ³ (worker)
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· PNECs

7681-52-9 sodium hypochlorite, solution

PNEC Freshwater mg/L	0.21 mg/L (-)
PNEC Marinewater mg/L	0.042 mg/L (-)
PNEC Sewage treatment Plant mg/L	0.03 mg/L (-)

68955-55-5 Amines, C12-18 alkyldimethyl, N-oxides

PNEC Freshwater mg/L	0.0335 mg/L (-)
PNEC Intermittent release	0.0335 (-) (mg/l)

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PNEC Marinewater mg/L	0.00335 mg/L (-)
PNEC Sewage treatment Plant mg/L	24 mg/L (-)
PNEC Soil	1.02 mg/Kg (-)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Alkaline resistant protective clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: According to product specification

· **Odour:** Chlorine-like

· **Odour threshold:** Not determined.

· **pH-value at 20 °C:** 13.7

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 106 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Self-igniting:** Product is not selfigniting.

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

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· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.13 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	15 s (DIN 53211/4)
· Solvent content:	
Organic solvents:	0.0 %
Solids content:	4.5 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Strong exothermic reaction with acids.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Chlorine

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

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

7681-52-9 sodium hypochlorite, solution

Oral	LD50	>2000 mg/kg (Rat)
Dermal	LD50	>2000 mg/kg (Rabbit)
	EC 50 / 48 h	0.141 mg/ltr (Daphnia magna (water flea))
	LC50 / 96 h	0.22-0.62 mg/ltr (Pimephales promelas)

85711-69-9 Sulfonic acids, C13-17-sec-alkanesulfonic, sodium salts

Oral	LD50	± 1900 mg/kg (Mouse)
		± 5000 mg/kg (Rat)
	EC50	12.5 mg/ltr (Daphnia magna (water flea))
		24 hours OECD 202
	LC50 / 48 h	2.8 mg/ltr (Oncorhynchus mykiss (Rainbow trout))

1310-73-2 sodium hydroxide

Oral	LD50	2000 mg/kg (Rat)
Dermal	LD50	1350 mg/kg (Rabbit)
	LC50 / 96 h	125 mg/ltr (Gambusia affinis)

68955-55-5 Amines, C12-18 alkyldimethyl, N-oxides

Oral	LD50	>2820 mg/kg (Rat)
Dermal	LD50	>2000 mg/kg (Rat)
	EC 50 / 48 h	2.4 mg/ltr (Daphnia magna (water flea))
	LC50 / 96 h	1.26 mg/ltr (fish)

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1310-58-3 potassium hydroxide

Oral	LD50	333 mg/kg (Rat)
	LC50/ 24 h	80 mg/ltr (fish)

· **Primary irritant effect:**· **on the skin:**

Strong caustic effect on skin and mucous membranes.

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:

Corrosive

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

SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:****85711-69-9 Sulfonic acids, C13-17-sec-alkanesulfonic, sodium salts**

OECD test 301 E ± 99 (biodegradation in % after 10 days)

· **12.2 Persistence and degradability** No further relevant information available.· **Other information:** The product is biodegradable.· **12.3 Bioaccumulative potential** No further relevant information available.· **12.4 Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

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

In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **12.5 Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations**· **13.1 Waste treatment methods**· **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.· **European waste catalogue**

12 00 00 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS

12 01 00 wastes from shaping and physical and mechanical surface treatment of metals and plastics

12 01 05 plastics shavings and turnings

20 00 00 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

20 01 00 separately collected fractions (except 15 01)

20 01 15* alkalines L 47/30 16.2.2001 Official Journal of the European Communities EN

· **Uncleaned packaging:**· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1719
· 14.2 UN proper shipping name · ADR · IMDG, IATA	1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), ENVIRONMENTALLY HAZARDOUS CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
· 14.3 Transport hazard class(es) · ADR	 
· Class · Label	8 (C5) Corrosive substances. 8
· IMDG, IATA	
· Class · Label	8 Corrosive substances. 8
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR):	No Symbol (fish and tree)
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Segregation groups	Warning: Corrosive substances. 80 F-A,S-B Alkalis
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Transport category · Tunnel restriction code	1L 2 E
· UN "Model Regulation":	UN1719, CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), ENVIRONMENTALLY HAZARDOUS, 8, II

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

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· Relevant phrases

H290 *May be corrosive to metals.*
 H302 *Harmful if swallowed.*
 H314 *Causes severe skin burns and eye damage.*
 H315 *Causes skin irritation.*
 H318 *Causes serious eye damage.*
 H319 *Causes serious eye irritation.*
 H400 *Very toxic to aquatic life.*

R22 *Harmful if swallowed.*
 R31 *Contact with acids liberates toxic gas.*
 R34 *Causes burns.*
 R35 *Causes severe burns.*
 R36/38 *Irritating to eyes and skin.*
 R38 *Irritating to skin.*
 R41 *Risk of serious damage to eyes.*
 R50 *Very toxic to aquatic organisms.*

· Department issuing MSDS:

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

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IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· * Data compared to the previous version altered.

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