

Safety Data Sheet dated 14/12/2018, version 1

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

1.1. Product identifier

Mixture identification

Trade name:

WC REIN

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

Recommended use:

Descaling detergent for toilet bowl cleaning.

Professional use (SU22) - Washing and cleaning products (PC35)

Uses advised against:

Different uses than recommended. Do not use in combination with other products.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

SUTTER INDUSTRIES s.p.a. - Società con Unico Socio

15060 Borghetto Borbera (AL) Italia

Tel. +39 0143 631.1

Competent person responsible for the safety data sheet:

regulatory.affairs@sutter.it

1.4. Emergency telephone number

+39 0143 631.1 mon-fri 9.00/17.00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- Warning, Met. Corr. 1, May be corrosive to metals.
- Warning, STOT SE 3, May cause respiratory irritation.
- Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
- Danger, Eye Dam. 1, Causes serious eye damage.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H290 May be corrosive to metals.

H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing vapours.



P280 Wear protective gloves and eye protection.

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 or 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.

Special Provisions:

EUH210 Only for professional use. Safety data sheet available on request.

Contains

HYDROCHLORIC ACID

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL

Product contents:

cationic surfactants, non-ionic surfactants

The product also contains: Perfumes

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable, the product is a mixture.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification: >= 12.5% - < 15% HYDROCHLORIC ACID

REACH No.: 01-2119484862-27, Index number: 017-002-01-X, CAS: 7647-01-0, EC: 231-595-7

< 5 %

- 2.16/1 Met. Corr. 1 H290
- 3.2/1B Skin Corr. 1B H314
- 3.3/1 Eye Dam. 1 H318
- ◆ 3.8/3 STOT SE 3 H335

>= 1% - < 2% 2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL

REACH No.: 01-2119510876-35, CAS: 25307-17-9, EC: 246-807-3

- 3.1/4/Oral Acute Tox. 4 H302
- 3.3/1 Eye Dam. 1 H318
- 3.2/1B Skin Corr. 1B H314
- 4.1/A1 Aquatic Acute 1 H400 M=10.





4.1/C1 Aquatic Chronic 1 H410 M=1.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Acute effects:

Severe skin and eye irritation for contact.

Irritation interior system if swallowed.

Until revison date of this document, are unknown chronic effects from the mixture contact with skin, eyes, inhalation, ingestion.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

The mixture does not contain ingredients classified as explosive according to EC Regulation 1272/2008 (CLP).

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into

Move undamaged containers from immediate hazard area if it can be done safely.

The mixture does not contain ingredients classified as explosive according to EC Regulation 1272/2008 (CLP).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment.



Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water. To converge the product in containment tanks.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in area dedicated to acid products, keep away from alkalys and chlorine based oxidants.

Store away from sunlight.

Store in a cool and well ventilated place.

Do not store in open or unlabeled containers.

Keep away from food, drink and feed.

Incompatible materials:

Store in area dedicated to acid products, keep away from alkalys and chlorine based oxidants.

Alkalines, Chlorine based oxidising, flammable, combustible.

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability. see also 1.2 and 7.2.

See section 10.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular, see paragraph 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Until the revision date of this document, no experimental data are available for the mixture. elow, listed occupational exposure limits, if available, for the components listed in paragraph 3.2.

HYDROCHLORIC ACID - CAS: 7647-01-0

EU - TWA(8h): 8 mg/m3, 5 ppm - STEL: 15 mg/m3, 10 ppm

ACGIH - STEL: Ceiling 2.9 mg/m3, Ceiling 2 ppm - Notes: A4 - URT irr

DNEL Exposure Limit Values

Until the revision date of this document, no experimental data are available for the mixture.



Below, listed the DNEL exposure limits, if available, for the components listed in paragraph 3.2

HYDROCHLORIC ACID - CAS: 7647-01-0

Worker Industry: 8 mg/m3 - Consumer: 8 - Exposure: Human Inhalation - Frequency:

Long Term, local effects

Worker Industry: 15 mg/m3 - Consumer: 15 - Exposure: Human Inhalation - Frequency: Short Term, local effects

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL - CAS: 25307-17-9

Worker Industry: 0.3 mg/kg - Consumer: 0.214 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Worker Industry: 2.112 mg/m3 - Consumer: 0.745 mg/m3 - Exposure: Human

Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.214 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic

effects

PNEC Exposure Limit Values

Until the revision date of this document, no experimental data are available for the mixture. Below, listed the PNEC exposure limits, if available, for the components listed in paragraph 3.2.

HYDROCHLORIC ACID - CAS: 7647-01-0

Target: Marine water - Value: 0.035 mg/l Target: Fresh Water - Value: 0.036 mg/l

Target: Microorganisms in sewage treatments - Value: 0.036 mg/l

Target: Air - Value: 0.045 mg/l

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL - CAS: 25307-17-9

Target: Marine water - Value: 0.000021 mg/l

Target: Microorganisms in sewage treatments - Value: 1.5 mg/l

Target: Marine water sediments - Value: 0.1692 mg/kg

Target: Soil (agricultural) - Value: 5 mg/kg Target: Food chain - Value: 2 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.(EN 166)

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton (EN 14605 in case of splashes or EN 13982 in case of dust)

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. (ex. EN 388 - EN 374 protection factor 6, corresponding to a breakthrough time >480 minutes).

Due to great diversity of types, observe the operating instructions of the manufacturer with respect to substances listed in paragraph 3.2.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged. (eg EN 140 or EN149)

Thermal Hazards:

The product is not flammable or explosive - see paragraph 2.1. The product contains no explosive components.

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

Environmental exposure controls:

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

See also section 6.2.

Appropriate engineering controls:



No further technical checks suitable for your product under normal conditions. See also section 1.2, section 7 and Exposure Scenario - Annex I of this document.

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Clear liquid,	Visual	
_	green		
Odour:	Floral	Olfactory	
Odour threshold:	Evident	Olfactory	
pH:	< 1,0		Estimated value on chemical / physical properties of components
Melting point / freezing point:	Not Relevant		Parameter not relevant for the type of product
Initial boiling point and boiling range:	>= 100°C		Estimated value on chemical / physical properties of components
Flash point:	> 60 ° C		Estimated value on chemical / physical properties of components
Evaporation rate:	Not Relevant		Parameter not relevant for the type of product
Solid/gas flammability:	Not Relevant		Parameter not relevant for the type of product
Upper/lower flammability	Not Relevant		Parameter not relevant for the
or explosive limits:			type of product
Vapour pressure:	Not Relevant		Parameter not relevant for the type of product
Vapour density:	Not Relevant		Parameter not relevant for the type of product
Relative density:	1.067 +/- 0.010 g/ml	Instrumental control	
Solubility in water:	Total		Internal tests
Solubility in oil:	Partial		Internal tests
Partition coefficient (n-octanol/water):	< 1000		Value estimated based on the solubility of the mixture.
Auto-ignition temperature:	Not Relevant		Parameter not relevant for the type of product
Decomposition temperature:	Not Relevant		Parameter not relevant for the type of product
Viscosity:	80 +/- 50 cP	Instrumental control	
Explosive properties:	Not Relevant		Parameter not relevant for product composition.
Oxidizing properties:	Not Relevant		Parameter not relevant for product composition.

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not Relevant		Parameter not relevant for the



		type of product
Fat Solubility:	Not Relevant	 Parameter not relevant for the type of product
Conductivity:	Not Relevant	 Parameter not relevant for the type of product
Substance Groups relevant properties	Not Relevant	 Parameter not relevant for the type of product

SECTION 10: Stability and reactivity

10.1. Reactivity

Do not use in combination with other products.

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

10.2. Chemical stability

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

10.3. Possibility of hazardous reactions

Store in area dedicated to acid products, keep away from alkalys and chlorine based oxidants.

In normal conditions no dangerous reactions of the mixture

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

See also scetion 7.2.

10.4. Conditions to avoid

Avoid direct sunlight and exposure to heat sources.

Different uses than recommended. Do not use in combination with other products. See also 1.2 and 7.2

10.5. Incompatible materials

Store in area dedicated to acid products, keep away from alkalys and chlorine based oxidants.

Alkalines, Chlorine based oxidising, flammable, combustible.

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability. see also 1.2 and 7.2.

10.6. Hazardous decomposition products

Toxic gas, chlorine.

Do not use in combination with other products.

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

WC REIN

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Corr. 1A H314

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified



Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

The product is classified: STOT SE 3 H335

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

i) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Below are reported, if available, the toxicological information of the components listed in paragraph 3.2.

HYDROCHLORIC ACID - CAS: 7647-01-0

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 45.6 mg/m3

Test: LD50 - Route: Oral - Species: Rat = 7051 mg/m3

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes

c) serious eye damage/irritation:

Test: Eye Corrosive - Species: Rabbit Yes

i) STOT-repeated exposure:

Test: NOAEC - Species: Rat = 15 mg/m3 - Notes: Respiratory system

2,2'-(OCTADEC-9-ENYLIMINO)BISETHAÑOL - CAS: 25307-17-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 300 mg/kg - Source: OECD 401

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive - Source: OECD 404

d) respiratory or skin sensitisation:

Test: Skin or Resp. Sensitization Negative - Source: OECD 406

e) germ cell mutagenicity:

Test: Mutagenesis Negative - Source: OECD 471 473 476

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

WC REIN

The product is classified: Aquatic Chronic 3 - H412

HYDROCHLORIC ACID - CAS: 7647-01-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 20.5 mg/l - Duration h: 96 - Notes: Lepomis

macrochirus - pH 3,25-3,50



Endpoint: EC50 - Species: Algae = 0.73 mg/l - Duration h: 72 - Notes: Chlorella

vulgaris - pH 4,7

Endpoint: EC50 - Species: Daphnia = 0.45 mg/l - Duration h: 48 - Notes: Daphnia

magna - pH 4,9

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae = 0.364 mg/l

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL - CAS: 25307-17-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.1 mg/l - Duration h: 96 - Notes: Danio rerio Endpoint: EC50 - Species: Daphnia > 0.01 mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: EC50 - Species: Algae > 0.01 mg/l - Duration h: 72 - Notes:

Pseudokirchneriella subcapitata

Endpoint: EC10 - Species: Algae > 0.01 mg/l - Duration h: 72 - Notes:

Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL - CAS: 25307-17-9

Biodegradability: Readily biodegradable - Test: OECD 301D - %: . - Notes: .

The surfactant(s) contained in this preparation complies with the biodegradability criteria laid down in Regulation (EC) No 648/2004 on detergents. All supporting data are kept available to the competent authorities of the Member States and will be provided to those authorities if they so request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL - CAS: 25307-17-9

Test: BCF - Bioconcentrantion factor 23.4

Test: Log Pow - Partition coefficient 3.4

12.4. Mobility in soil

Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL - CAS: 25307-17-9

Notes: OECD 106

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

Until the revision date of this document, unknown adverse effects and symptoms towards the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Do not discharge into the ground or into drains.

See also section 6

SECTION 14: Transport information





14.1. UN number

ADR-UN Number: 1760 IATA-UN Number: 1760 IMDG-UN Number: 1760

14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, N.O.S.(HYDROCHLORIC ACID,

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL)

IATA-Shipping Name: CORROSIVE LIQUID, N.O.S.(HYDROCHLORIC ACID,

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL)

IMDG-Shipping Name: CORROSIVE LIQUID, N.O.S.(HYDROCHLORIC ACID,

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL)

14.3. Transport hazard class(es)

ADR-Class: 8

ADR - Hazard identification number: 80 IATA-Class: 8

ADR/IATA/IMDG-Label: 8 IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary risks: - ADR-S.P.: 274

ADR-Transport category (Tunnel restriction code): E

IATA-Passenger Aircraft: 852
IATA-Subsidiary risks: IATA-Cargo Aircraft: 856
IATA-S.P.: IATA-ERG: 8L
IMDG-SP 223 274
IMDG-EmS: F-A , S-B

IMDG-Subsidiary risks: -

IMDG-Stowage and handling: Category A SW2

IMDG-Segregation: -

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 Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013



Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No, for instructions on safe mangling you see Sections 7 and 8 and the exposure scenario - Annex I of this document.

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3



Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Met. Corr. 1, H290	On basis of test data
STOT SE 3, H335	Calculation method
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage

of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American

Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

ECO/10/20/50/100: Effective concentration, for 0/10/20/50/100 percent of test

population.

EINECS: European Inventory of Existing Commercial Chemical

Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air

Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation

Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC0/10/20/50/100: Lethal concentration, for 0/10/20/50/100 percent of test

population.

LD0/10/20/50/100: Lethal dose, for 0/10/20/50/100 percent of test population.

NOEC: No Observed Effect Concentration

NOAEL(R)/NOAEC: No Observed Adverse Effect Level(Repeated)/Concentration OECD: Organisation for Economic Co-operation and Development

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of

Dangerous Goods by Rail.





STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.



ANNEX I PROFESSIONAL PRODUCT – DETERGENT FOR HARD SURFACES

Title of exposure scenario		
Detergent for general cleaning: Manual process.		
Use description		
Sector Use	SU22 – Professional use	
Product Category	PC35 – Washing and cleaning products (including solvent	
	based products)	
Description of activities/process considered on e	xposure scenario.	
Diluite with water as specified on the label, if nece	•	
Use following the use instruction as specified on t	he label.	
Leave on.		
Rinse, if necessary.		
Frequency and duration		
Use phase	 1 time a day for daily cleaning detergents 	
	 Periodical for specific detergents 	
Relevant limit values of ingredients, if available, ar	re stated in section 8 of the SDS.	
Physical appearence and concentration		
Liquid. To dilute or ready to use.		
In section 2 of the SDS of product and on the label	·	
	sification and on chemical/physical properties stated in section 9	
of the SDS of product.		
Use conditions		
Room temperature		
Good general ventilation at workplace is sufficient		
Protection		
See section 8 of the SDS of product to more	Training of worker to use and maintenance of PPE is	
information on PPE.	supposed.	
on't eat or drink, don't smoke. Avoid contact with damaged skin.		
o open flame. Do not use in combination with other products		
Wash hand after use.		
In case of accidental release: dilute with water and	d dry.	
See section 6 of the SDS in case of accidental relea	ase	
Follow use instruction as specified on the label or	on technical sheet. Use good occupational hygiene practices as	
specified in section 7 on the SDS.		
Environmental measures		
See section 6 of the SDS in case of accidental relea	ase	
See section 12 of the SDS for ecotoxicological info	rmation of mixture and dangerous ingredients.	
See section 13 of the SDS for disposal consideration	ons.	

Note:

SDS: Safety Data Sheet

PPE: Personal Protection Equipment