



NIELSEN

SAFETY DATA SHEET BACTERICIDAL ALL PURPOSE CLEANER

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

1.1. Product identifier

Product name BACTERICIDAL ALL PURPOSE CLEANER
Internal identification L960

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

Identified uses Cleaning agent.
Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier
NIELSEN CHEMICALS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
info@nielsenchemicals.com
TEL: +44 (0) 1283 222277
FAX: +44 (0) 1283 225731

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs). +44 (0) 1865 407333 (24 hrs). MEDICAL AND ENVIRONMENTAL EMERGENCIES ONLY.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Met. Corr. 1 - H290
Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318
Environmental hazards Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC) C;R34.

2.2. Label elements

Pictogram



Signal word Danger

BACTERICIDAL ALL PURPOSE CLEANER

Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. 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. P501 Dispose of contents/ container in accordance with national regulations. P280 Wear protective clothing, gloves, eye and face protection.
Contains	SODIUM HYDROXIDE
Detergent labelling	< 5% cationic surfactants, < 5% disinfectants, < 5% EDTA and salts thereof, < 5% non-ionic surfactants, < 5% perfumes, < 5% phosphates, Contains d-LIMONENE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DISODIUM METASILICATE		1-5%
CAS number: 6834-92-0	EC number: 229-912-9	REACH registration number: 01-2119449811-37-XXXX
Classification Met. Corr. 1 - H290 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) C;R34 Xi;R37	
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate		1-5%
CAS number: 51981-21-6	EC number: 257-573-7	REACH registration number: 01-2119493601-38-XXXX
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -	
TETRA POTASSIUM PYROPHOSPHATE		1-5%
CAS number: 7320-34-5	EC number: 230-785-7	REACH registration number: 01-2119489369-18-XXXX
Classification Eye Irrit. 2 - H319	Classification (67/548/EEC or 1999/45/EC) Xi;R36.	

BACTERICIDAL ALL PURPOSE CLEANER

QUARTERNARY COCO ALKYL METHYL AMINE ETHOXYLATE METHYL CHLORIDE		1-5%
CAS number: 1554325-20-0		
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318	Classification (67/548/EEC or 1999/45/EC) Xn;R22. Xi;R38,R41. N;R50.	
ALCOHOL C9-11 ETHOXYLATE		1-5%
CAS number: 68439-46-3		
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318	Classification (67/548/EEC or 1999/45/EC) Xn;R22. Xi;R41.	
SODIUM HYDROXIDE		<1%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27
Classification Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318	Classification (67/548/EEC or 1999/45/EC) C;R35	
Quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides		<1%
CAS number: 68424-85-1	EC number: 939-350-2	
M factor (Acute) = 10	M factor (Chronic) = 1	
Classification Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) Xn;R22. C;R34. N;R50.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Chemical burns must be treated by a physician. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Rinse immediately with plenty of water. Get medical attention.

BACTERICIDAL ALL PURPOSE CLEANER

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

General information Chemical burns must be treated by a physician.

Inhalation May cause discomfort.

Ingestion May cause chemical burns in mouth and throat.

Skin contact Causes severe burns.

Eye contact Severe irritation, burning and tearing.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid contact with skin, eyes and clothing. Take care as floors and other surfaces may become slippery. Do not touch or walk into spilled material. Provide adequate ventilation. Do not handle broken packages without protective equipment. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Harmful to aquatic life with long lasting effects. Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb spillage to prevent material damage. Absorb spillage with inert, damp, non-combustible material. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. When handling waste, the safety precautions applying to handling of the product should be considered. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority. Dispose of this material and its container to hazardous or special waste collection point. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

BACTERICIDAL ALL PURPOSE CLEANER

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid spilling. Avoid contact with skin, eyes and clothing. Avoid release to the environment. Avoid contact with contaminated tools and objects. Do not empty into drains. Do not eat, drink or smoke when using this product. Do not handle broken packages without protective equipment. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store at temperatures between 4°C and 40°C. Keep only in the original container.

Storage class

Corrosive storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit

DISODIUM METASILICATE (CAS: 6834-92-0)

DNEL

Industry - Dermal; Long term : 1.49 mg/kg/day
 Industry - Inhalation; Long term : 6.22 mg/m³
 Consumer - Dermal; Long term : 0.74 mg/kg/day
 Consumer - Inhalation; Long term : 1.55 mg/m³
 Consumer - Oral; Long term : 0.74

tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate (CAS: 51981-21-6)

DNEL

Workers - Inhalation; Long term systemic effects: 7.3 mg/m³
 Workers - Dermal; Long term systemic effects: 15,000 mg/kg/day
 General population - Inhalation; Long term systemic effects: 1.8 mg/m³
 General population - Dermal; Long term systemic effects: 7,500 mg/kg/day
 General population - Oral; Long term systemic effects: 1.5 mg/kg/day

TETRA POTASSIUM PYROPHOSPHATE (CAS: 7320-34-5)

DNEL

Industry - Inhalation; Long term systemic effects: 2.79
 Consumer - Inhalation; Long term systemic effects: 0.68 mg/m³

PNEC

- Fresh water; 0.05 mg/l
 - Marine water; 0.005 mg/l

ALCOHOL C9-11 ETHOXYLATE (CAS: 68439-46-3)

DNEL

Workers - Inhalation; Long term systemic effects: 294 mg/m³
 Workers - Dermal; Long term systemic effects: 2080 mg/kg/day
 General population - Inhalation; Long term systemic effects: 87 mg/m³
 General population - Dermal; Long term systemic effects: 1250 mg/kg/day
 General population - Oral; Long term systemic effects: 25 mg/kg/day

BACTERICIDAL ALL PURPOSE CLEANER

PNEC	- Fresh water; 0.10379 mg/l
	- Marine water; 0.10379 mg/l
	- Fresh water, Intermittent release; 0.014 mg/l
	- Sediment (Freshwater); 13.7 mg/kg
	- Sediment (Marinewater); 13.7 mg/kg
	- Soil; 1 mg/kg
	- STP; 1.4 mg/l

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Industry - Inhalation; Short term local effects: 1 mg/m ³
	Industry - Inhalation; Long term local effects: 1 mg/m ³
	Consumer - Inhalation; Short term local effects: 1 mg/m ³

Quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides (CAS: 68424-85-1)

DNEL	Industry - Dermal; Long term systemic effects: 5.7 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 3.96 mg/m ³
	Consumer - Oral; Long term systemic effects: 3.4 mg/kg/day
	Consumer - Dermal; Long term systemic effects: 3.4 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 1.64 mg/m ³

PNEC	- Fresh water; .0009 mg/l
	- Marine water; .00096 mg/l
	- Intermittent release; .00016 mg/l
	- Sediment (Freshwater); 12.27 mg/kg
	- Sediment (Marinewater); 13.09 mg/kg
	- Soil; 7.0 mg/kg
	- STP; 0.4 mg/l

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

DNEL	Workers - Inhalation; Long term local effects, systemic effects: 1.5 mg/m ³
	Workers - Inhalation; Short term systemic effects, local effects: 3 mg/m ³
	Consumer - Inhalation; Long term systemic effects, local effects: 0.6 mg/m ³
	Consumer - Inhalation; Short term local effects, systemic effects: 1.2 mg/m ³
	Consumer - Oral; Long term systemic effects, local effects: 25 mg/m ³

PNEC	- Fresh water; 2.2 mg/l
	- Marine water; 0.22 mg/l
	- Intermittent release; 1.2 mg/l
	- STP; 43 mg/l
	- Soil; 0.72 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

BACTERICIDAL ALL PURPOSE CLEANER

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. For exposure up to 4 hours, wear gloves made of the following material: Laminate of polyethylene and ethylene vinyl alcohol (PE/EVOH). Thickness: 0.06 mm Neoprene. Thickness: 0.46 mm Nitrile rubber. Thickness: 0.28 mm Rubber (natural, latex). Thickness: 0.48 mm Polyvinyl chloride (PVC). Thickness: N/A Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Hygiene measures

Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green-yellow.
Odour	Lemon.
pH	pH (concentrated solution): > 13 pH (diluted solution): 11.7 @ 1:30
Relative density	1.050 @ 25°C
Solubility(ies)	Completely soluble in water.

9.2. Other information

Other information	Not determined.
-------------------	-----------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
------------	---

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
-----------	---

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
------------------------------------	-----------------

10.4. Conditions to avoid

Conditions to avoid	Reactions with the following materials may generate heat: Acids.
---------------------	--

10.5. Incompatible materials

Materials to avoid	Do not mix with acid. Avoid contact with acids.
--------------------	---

BACTERICIDAL ALL PURPOSE CLEANER

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 20,424.34

Skin corrosion/irritation

Extreme pH ≥ 11.5 Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed. No testing is needed.

Inhalation May cause discomfort.

Ingestion May cause chemical burns in mouth and throat.

Skin contact Causes severe burns.

Eye contact Severe irritation, burning and tearing.

DISODIUM METASILICATE

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE dermal (mg/kg) 5,000.0

tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,001.0

Species Rat

ATE oral (mg/kg) 2,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.1

Species Rat

ATE dermal (mg/kg) 2,000.1

TETRA POTASSIUM PYROPHOSPHATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,001.0

BACTERICIDAL ALL PURPOSE CLEANER

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 7,940.0

Species Rabbit

Reproductive toxicity

Reproductive toxicity - development Embryotoxicity: - NOAEL: > 128 mg/kg, Oral, Rabbit

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL < 10000 mg/kg, Oral, Rat

QUARTERNARY COCO ALKYL METHYL AMINE ETHOXYLATE METHYL CHLORIDE

Acute toxicity - oral

Notes (oral LD₅₀) Estimated value.

ATE oral (mg/kg) 833.33

ALCOHOL C9-11 ETHOXYLATE

Acute toxicity - oral

ATE oral (mg/kg) 500.0

SODIUM HYDROXIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

ATE oral (mg/kg)

Quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 397.5

Species Rat

ATE oral (mg/kg) 397.5

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,412.0

Species Rabbit

SECTION 12: Ecological Information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

BACTERICIDAL ALL PURPOSE CLEANER

Acute toxicity - fish Not determined.

DISODIUM METASILICATE

Acute toxicity - fish LC₅₀, 96 hours: 180 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1700 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 207 mg/l, Scenedesmus subspicatus

tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate

Acute toxicity - fish LC₅₀, 96 hours: > 100 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 100 mg/l, Daphnia magna

TETRA POTASSIUM PYROPHOSPHATE

Acute toxicity - fish LC₅₀, 96 hours: > 100 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 100 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 100 mg/l, Freshwater algae

QUARTERNARY COCO ALKYL METHYL AMINE ETHOXYLATE METHYL CHLORIDE

Acute toxicity - fish LC₅₀, 96 hours: >10 - 100 mg/l mg/l, Algae

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1 - 10 mg/l mg/l, Daphnia magna

ALCOHOL C9-11 ETHOXYLATE

Acute toxicity - fish LC₅₀, 96 hours: 57 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 2.5 mg/l, Daphnia magna

SODIUM HYDROXIDE

Acute toxicity - fish LC₅₀, 48 hours: ~ 145 mg/l, Poecilia reticulata (Guppy)
REACH dossier information.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: ~ 76 mg/l, Daphnia magna
REACH dossier information.

Quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides

Acute aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute) 10

BACTERICIDAL ALL PURPOSE CLEANER

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.03 mg/l mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: ~ 0.06 mg/l, Selenastrum capricornutum
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

SECTION 14: Transport information

Special Provisions note

14.1. UN number

UN No. (ADR/RID) 1760

UN No. (IMDG) 1760

UN No. (ICAO) 1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE LIQUID, N.O.S. (sodium hydroxide)

Proper shipping name (IMDG) CORROSIVE LIQUID, N.O.S. (sodium hydroxide)

Proper shipping name (ICAO) CORROSIVE LIQUID, N.O.S. (sodium hydroxide)

14.3. Transport hazard class(es)

ADR/RID class 8

IMDG class 8

ICAO class/division 8

BACTERICIDAL ALL PURPOSE CLEANER

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Tunnel restriction code (E)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Commission Regulation (EU) No 453/2010 of 20 May 2010.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
vPvB: Very Persistent and Very Bioaccumulative.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 20/10/2016

Revision 4.0

BACTERICIDAL ALL PURPOSE CLEANER

Supersedes date	11/06/2015
SDS number	24679
Risk phrases in full	R22 Harmful if swallowed. R34 Causes burns. R35 Causes severe burns. R36 Irritating to eyes. R37 Irritating to respiratory system. R38 Irritating to skin. R41 Risk of serious damage to eyes. R50 Very toxic to aquatic organisms.
Hazard statements in full	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. H332 Harmful if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.