



SAFETY DATA SHEET

Tilex® Mold & Mildew Remover - US

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name Tilex® Mold & Mildew Remover - US
Product number TX01100US, TX01234US

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

Identified uses Kills and removes mildew stains.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier CBee (Europe) Ltd.
Eton House,
2nd Floor,
18 - 24 Paradise Road,
Richmond,
TW9 1SE
UK
tel: +44 (0) 208 614 7120
fax: +44 (0) 208 940 2040
consumerservices@clorox.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 208 614 7120
Monday - Thursday:- 09:00 - 17:30
Friday:- 09:00 - 17:00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Not Classified

Health hazards

Eye Irrit. 2 - H319

Environmental hazards

Aquatic Acute 1 - H400

Classification (67/548/EEC or 1999/45/EC)

Xi; R36. N; R50

2.2. Label elements

Pictogram



Signal word



Warning

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Hazard statements

H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Precautionary statements

P102 Keep out of reach of children.
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye and 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.
P501 Dispose of contents/container in accordance with national regulations.

Supplemental label information

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains

Sodium hypochlorite, solution 2.85 % Cl active

Detergent labelling

< 5% disinfectants, < 5% perfumes

Supplementary precautionary statements

P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.

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

Sodium hypochlorite, solution ... % Cl active	2.85%
CAS number: 7681-52-9 EC number: 231-668-3	
M factor (Acute) = 10	
Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1B - H314	C; R34. N; R50. R31
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	
sodium hydroxide	0.5 - <1%
CAS number: 1310-73-2 EC number: 215-185-5	
Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1A - H314	C; R35
Eye Dam. 1 - H318	
Dodecyltrimethylamine oxide	0.025 - <0.25%
CAS number: 1643-20-5 EC number: 216-700-6	
M factor (Acute) = 1	
Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315	Xi; R41, R38. N; R50
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	

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Benzene	<0.025%
CAS number: 71-43-2 EC number: 200-753-7	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F; R11. T; R48/23/24/25. Xn; R65. Xi; R36/38. Carc. Cat. 1
Skin Irrit. 2 - H315	R45. Muta. Cat. 2 R46
Eye Irrit. 2 - H319	
Muta. 1B - H340	
Carc. 1A - H350	
STOT RE 1 - H372	
Asp. Tox. 1 - H304	

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****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. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact

Wash skin thoroughly with soap and water.

Eye contact

Remove any contact lenses and open eyelids wide apart. Continue to rinse.

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

Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

Irritation of eyes and mucous membranes. Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed**Notes for the doctor**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture**Hazardous combustion products**

Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or

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vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters

Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions

Contain spillage with sand, earth or other suitable non-combustible material. Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Neutralise spilled material with diluted hydrochloric acid. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections

See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations.

Advice on general occupational hygiene

Avoid contact with eyes and prolonged skin contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in a cool and well-ventilated place.

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

Benzene

Long-term exposure limit (8-hour TWA): WEL 1 ppm 3.25 mg/m³

Carc, Sk

WEL = Workplace Exposure Limit

Carc = Capable of causing cancer and/or heritable genetic damage.

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Eye/face protection

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Wear chemical splash goggles.

Hand protection

No specific hand protection recommended.

Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Clear liquid.

Colour

Colourless to pale yellow.

Odour

Bleach Marine.

Odour threshold

Not determined.

pH

pH (concentrated solution): 12.4 - 12.8

Melting point

Not relevant.

Initial boiling point and range

Not determined.

Flash point

Not determined.

Evaporation rate

Not determined.

Evaporation factor

Not determined.

Flammability (solid, gas)

Not relevant.

Upper/lower flammability or explosive limits

Not relevant.

Vapour pressure

Not determined.

Vapour density

Not relevant.

Relative density

1.04

Bulk density

Not determined.

Solubility(ies)

Completely soluble in water.

Partition coefficient

Not determined.

Auto-ignition temperature

Not relevant.

Decomposition Temperature

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Not relevant.

Viscosity

Not determined.

Explosive properties

Not considered to be explosive.

Oxidising properties

The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information

Other information

No information required.

SECTION 10: Stability and reactivity

10.1. 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

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Based on available data the classification criteria are not met.

Acute toxicity - dermal

Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data

Dose: 0.5 ml, Rabbit, Based on available data the classification criteria are not met.

Serious eye damage/irritation

Eye Irrit. 2 - H319 May cause severe eye irritation.

Respiratory sensitisation

Based on available data the classification criteria are not met.

Skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

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Genotoxicity - in vitro

Based on available data the classification criteria are not met.

Genotoxicity - in vivo

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

Reproductive toxicity - development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

Toxicological information on ingredients.

Sodium hypochlorite, solution ... % Cl active

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)

8,830.0

Species

Rat

REACH dossier information. Based on available data the classification criteria are not met.

ATE oral (mg/kg)

8,830.0

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)

20000.0

Species

Rabbit

REACH dossier information. Based on available data the classification criteria are not met.

ATE dermal (mg/kg)

20000.0

Acute toxicity - inhalation

Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data

Dose: 5.3%, 4 hours, Rabbit Primary dermal irritation index: 1.2 Dose: 0.5 ml (12.5%), 24 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Corrosive to skin.

Serious eye damage/irritation

Dose: 0.1 g, 1 second, Rabbit REACH dossier information. Corrosivity to eyes is assumed.

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Skin sensitisation

Buehler test - Guinea pig: Not sensitising. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro

Chromosome aberration: Negative. REACH dossier information.

Genotoxicity - in vivo

Chromosome aberration: Negative. REACH dossier information.

Carcinogenicity

NOAEL > 13.75 mg/kg/day, Oral, Rat REACH dossier information.

IARC carcinogenicity

IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility

One-generation study - NOAEL > 5 mg/kg/day, Oral, Rat P REACH dossier information.

Reproductive toxicity - development

Teratogenicity: - NOAEL: >=5.7 mg/kg/day, Oral, Rat REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

LOAEL 100 mg/kg/day, Oral, Rat REACH dossier information.

Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

sodium hydroxide

Skin corrosion/irritation

Animal data

Skin Corr. 1A - H314

Serious eye damage/irritation

Dose: 0.1 ml (2%), 1 second, Rabbit REACH dossier information.

Skin sensitisation

Patch test - Human: Not sensitising. REACH dossier information.

Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

Dodecyldimethylamine oxide

Skin corrosion/irritation

Animal data

Skin Irrit. 2 - H315

Serious eye damage/irritation

Eye Dam. 1 - H318

SECTION 12: Ecological Information

12.1. Toxicity

Aquatic Acute 1 - H400 Very toxic to aquatic life.

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Ecological information on ingredients.

Sodium hypochlorite, solution ... % Cl active

Acute aquatic toxicity

LE(C)₅₀

0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute)

10

Acute toxicity - fish

LC₅₀, 96 hours: 0.032 mg/l, Oncorhynchus kisutch (Coho salmon) REACH dossier information.

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 0.141 mg/l, Daphnia magna REACH dossier information.

Acute toxicity - microorganisms

EC₅₀, 3 hours: > 3 mg/l, Activated sludge REACH dossier information.

Acute toxicity - terrestrial

NOEC, 10 days: 200 mg/l, Coturnix coturnix japonica (Japanese quail) REACH dossier information.

Chronic toxicity - fish early life stage

NOEC, 28 days: 0.04 mg/l, Menidia peninsulae (Tidewater silverside) REACH dossier information.

Chronic toxicity - aquatic invertebrates

NOEC, 15 days: 0.007 mg/l, Freshwater invertebrates REACH dossier information.

sodium hydroxide

Acute toxicity - fish

LC₅₀, 48 hours: 189 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 40.4 mg/l, Ceriodaphnia REACH dossier information.

Dodecyldimethylamine oxide

Aquatic Acute 1 - H400

Acute aquatic toxicity

LE(C)₅₀

0.1 < L(E)C₅₀ ≤ 1

M factor (Acute)

1

12.2. Persistence and degradability

Persistence and degradability

The surfactant(s) contained in this product complies(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.

Ecological information on ingredients.

Sodium hypochlorite, solution ... % Cl active

Phototransformation

Air - DT₅₀ : 114.6 days Estimated value. Water - DT₅₀ : 12 minutes REACH dossier information.

Dodecyldimethylamine oxide

Persistence and degradability

The product is readily biodegradable.

12.3. Bioaccumulative potential

No data available on bioaccumulation.

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Partition coefficient

Not determined.

Ecological information on ingredients.

Sodium hypochlorite, solution ... % Cl active

Partition coefficient

log Pow: -3.42 Estimated value. REACH dossier information.

sodium hydroxide

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility

The product is soluble in water.

Ecological information on ingredients.

Sodium hypochlorite, solution ... % Cl active

Henry's law constant

0.076 @ 20°C Estimated value. REACH dossier information.

Surface tension

82.4 mN/m @ 20°C REACH dossier information.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Not relevant.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of waste product or used containers in accordance with local regulations

Disposal methods

Avoid the spillage or runoff entering drains, sewers or watercourses. Neutralise waste with diluted hydrochloric acid.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)

14.3. Transport hazard class(es)

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ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels**14.4. Packing group**

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



Yes.

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

EH40/2005 Workplace exposure limits.

EU legislation

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended)
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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information**Classification procedures according to Regulation (EC) 1272/2008**

Eye Irrit. 2 - H319, Aquatic Acute 1 - H400: Calculation method.

Tilex® Mold & Mildew Remover - US**Revision comments**

Classification according to CLP Annex I.

Revision date 14/05/2014

Revision 4

Supersedes date 01/03/2014

SDS number 186

Risk phrases in full

R11 Highly flammable.

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.

R45 May cause cancer.

R46 May cause heritable genetic damage.

R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R50 Very toxic to aquatic organisms.

R65 Harmful: may cause lung damage if swallowed.

Hazard statements in full

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

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