

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

1.1. Product identifier

Product form : Mixture
Product name : Millenium 5000

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

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Tower Products Europe B.V.
Rendementsweg 20B-1
3641 SL Mijdrecht - Nederland
T +31 297 289 691

1.4. Emergency telephone number

Emergency number : +1-800-424-9300 (CHEMTREC)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318
Reproductive toxicity, Category 1B H360
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Causes skin irritation. Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS08

Signal word (CLP) : Danger
Hazardous ingredients : Acetic acid; Citric Acid Anhydrous; Borax Decahydrate; 2-ethylhexyl Sodium Sulphate
Hazard statements (CLP) : H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H360 - May damage fertility. May damage the unborn child. (if swallowed, in contact with skin).
Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective clothing, eye protection, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No additional information available

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according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve	(CAS-No.) 111-76-2 (EC-No.) 203-905-0 (EC Index-No.) 603-014-00-0 (REACH-no) 01-2119475108-36	10 - 20	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315
2-ethylhexyl Sodium Sulphate	(CAS-No.) 126-92-1 (EC-No.) 204-812-8 (REACH-no) 01-2119971586-23	< 5	Skin Irrit. 2, H315 Eye Dam. 1, H318
Acetic acid	(CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6 (REACH-no) 01-2119475328-30	< 5	Flam. Liq. 3, H226 Skin Corr. 1A, H314
Citric Acid Anhydrous	(CAS-No.) 77-92-9 (EC-No.) 201-069-1 (REACH-no) 01-2119457026-42	< 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Sodium xylenesulphonate	(CAS-No.) 1300-72-7 (EC-No.) 215-090-9 (REACH-no) 01-2119513350-56	< 5	Eye Irrit. 2, H319
Borax Decahydrate substance listed as REACH Candidate (Disodium tetraborate, anhydrous)	(CAS-No.) 1303-96-4 (EC-No.) 215-540-4 (EC Index-No.) 005-011-01-1 (REACH-no) 01-2119490790-32	< 5	Eye Irrit. 2, H319 Repr. 1B, H360FD

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Acetic acid	(CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6 (REACH-no) 01-2119475328-30	(10 =<C < 100) Skin Irrit. 2, H315 (10 =<C < 100) Eye Irrit. 2, H319 (25 =<C < 100) Skin Corr. 1B, H314 (90 =<C < 100) Skin Corr. 1A, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetic acid (64-19-7)		
EU	IOELV TWA (mg/m ³)	25 mg/m ³
EU	IOELV STEL (mg/m ³)	50 mg/m ³
Germany	TRGS 910 Acceptable concentration notes	

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Materials for protective clothing:					
Condition	Material	Standard			
Good resistance:	Synthetic material	EN 13034			
Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.31mm		EN ISO 374, EN 388
Eye protection:					
Safety glasses					
Type	Use	Characteristics		Standard	
Safety glasses	Droplet	With side shields		EN 166	
Skin and body protection:					
Wear suitable protective clothing					

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Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Device	Filter type	Condition	Standard
Dust mask	ABEK-P3	Vapour protection	EN 140, EN 14387

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: dark blue.
Odour	: No data available
Odour threshold	: No data available
pH	: 4,6
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

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Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Acetic acid (64-19-7)	
LD50 oral	3310 mg/kg bodyweight
LD50 dermal	1060 mg/kg bodyweight

Citric Acid Anhydrous (77-92-9)	
LD50 oral rat	3000 mg/kg bw/day
LD50 dermal rat	> 2000 mg/kg

Borax Decahydrate (1303-96-4)	
LD50 oral rat	6000 mg/kg
LD50 dermal rabbit	2000 mg/kg

2-ethylhexyl Sodium Sulphate (126-92-1)	
LD50 oral rat	2840 mg/kg
LD50 dermal rat	> 2000 mg/kg

Sodium xylenesulphonate (1300-72-7)	
LD50 oral	> 7000 mg/kg bodyweight
LD50 dermal	> 2000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
pH: 4,6

Serious eye damage/irritation : Causes serious eye damage.
pH: 4,6

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility. May damage the unborn child. (if swallowed, in contact with skin).

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Acetic acid (64-19-7)	
LC50 fish 1	> 1000 mg/l
EC50 other aquatic organisms 1	> 1000 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l

Borax Decahydrate (1303-96-4)	
LC50 fish 1	79,7 mg/l
EC50 Daphnia 1	133 mg/l
EC50 72h algae (1)	40 mg/l

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Sodium xylenesulphonate (1300-72-7)	
EC50 other aquatic organisms 1	> 1020 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
Acetic acid (64-19-7)	
Log Pow	-0,17

Borax Decahydrate (1303-96-4)	
Log Pow	1,53 - 1,58
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
Component	
Borax Decahydrate (1303-96-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
12.6. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Disodium tetraborate, anhydrous (EC 215-540-4, CAS 1303-96-4)

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

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15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H360	May damage fertility or the unborn child.
H360FD	May damage fertility. May damage the unborn child.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product