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

1.1. Product identifier

Trade name or designation of the mixture Sani-Cide EX3 Concentrate (EU only)

Registration number -

Synonyms None.

Part Number ECC-SCIDEX3C/3, (Formula: ELB-SCIDEX3C/3)

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

Identified uses Cleaner, Disinfectant.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Wynn's Belgium BV

Address Industriepark-West 46
B-9100 Sint-Niklaas, Belgium

Telephone +1-410-822-5775

Manufacturer

Company name Celeste Industries Corporation

Address 8007 Industrial Park Rd
Easton, Maryland 21601 (USA)

Telephone +1-410-822-5775

Email info@celestecorp.com

1.4. Emergency telephone number

CHEMTREC (24 hours) within USA and CANADA 1-800-424-9300

Outside USA and Canada (collect call accepted): 1-703-527-3883

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards		
Corrosive to metals	Category 1	H290 - May be corrosive to metals.
Health hazards		
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Environmental hazards		
Hazardous to the aquatic environment, acute aquatic hazard	Category 1	H400 - Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 1,3-dibutyl-2-thiourea, Alcohols, C9-11, branched and linear, ethoxylated, bronopol (INN), L-(+)-lactic acid, Linalyl Acetate, N-(n-octyl)-2-pyrrolidone, Octan-1-ol, ethoxylated, Sodium octane-1-sulphonate monohydrate

Hazard pictograms

Signal word Danger

Hazard statements

H290 May be corrosive to metals.

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273	Avoid release to the environment.
P234	Keep only in original packaging.
P261	Avoid breathing mist/vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

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 CENTRE/doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material-damage.
P391	Collect spillage.

Storage Not assigned.

Disposal Not assigned.

Supplemental label information 23,7 % of the mixture consists of component(s) of unknown acute dermal toxicity. 20,08 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 24,08 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Alcohols, C9-11, branched and linear, ethoxylated	5 - 10	68439-46-3 -	-	-	
Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg), Eye Dam. 1;H318, Aquatic Chronic 3;H412					
Sodium octane-1-sulphonate monohydrate	5 - 10	5324-84-5 226-195-4	-	-	
Classification: Skin Corr. 1B;H314, Eye Dam. 1;H318					
1 -phenoxy-2-propanol	1 - 5	770-35-4 212-222-7	-	-	
Classification: Eye Irrit. 2;H319					
2-Hydroxy-1,2,3-propanetricarboxylic acid	1 - 5	77-92-9 201-069-1	-	-	
Classification: Eye Irrit. 2;H319, STOT SE 3;H335					
4-dodecan-3-ylbenzenesulfonic acid	1 - 5	68584-22-5 271-528-9	-	-	
Classification: Eye Irrit. 2;H319					
bronopol (INN)	1 - 5	52-51-7 200-143-0	-	603-085-00-8	
Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg), Acute Tox. 4;H312;(ATE: 1100 mg/kg), Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400(M=10), Aquatic Chronic 2;H411					
L-(+)-lactic acid	1 - 5	79-33-4 201-196-2	-	607-743-00-5	
Classification: Skin Corr. 1C;H314, Eye Dam. 1;H318					
N-(n-octyl)-2-pyrrolidone	1 - 5	2687-94-7 403-700-8	-	613-098-00-0	
Classification: Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Chronic 2;H411					

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Octan-1-ol, ethoxylated	1 - 5	27252-75-1 500-058-1	-	-	
Classification: Skin Corr. 1;H314, Eye Dam. 1;H318					
1,3-dibutyl-2-thiourea	0,1 - 1	109-46-6 203-674-6	-	-	
Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg), Acute Tox. 4;H312;(ATE: 1100 mg/kg), Skin Sens. 1A;H317, STOT RE 1;H372, Aquatic Chronic 2;H411					
Linalyl Acetate	0,1 - 1	115-95-7 204-116-4	-	-	
Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1B;H317					
Other components below reportable levels	57.11				

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.
M: M-factor
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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 During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Keep unnecessary personnel away. Avoid breathing mist/vapours. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

This product is miscible in water. Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not get this material in contact with eyes. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in tightly closed container. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS).

Storage class (TRGS 510): 8B (Non-combustible corrosive substances)

7.3. Specific end use(s)

Cleaner, Disinfectant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	49 mg/m3
		10 ppm
	MAK	49 mg/m3
		10 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	MAK	500 mg/m3
		200 ppm
	STEL	2000 mg/m3
		800 ppm

Belgium. Exposure Limit Values

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3
	TWA	980 mg/m3

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	MAC	123 mg/m3
		25 ppm
	STEL	123 mg/m3

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	MAC	999 mg/m3
		400 ppm
	STEL	1250 mg/m3
		500 ppm

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	980 mg/m3
		400 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
2-Hydroxy-1,2,3-propanetric arboxylic acid (CAS 77-92-9)	TWA	4 mg/m3	Dust.
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Ceiling	1000 mg/m3	
	TWA	500 mg/m3	
Sodium nitrate (CAS 7631-99-4)	TWA	6 mg/m3	Dust.

Denmark. Exposure Limit Values

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	125 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TLV	490 mg/m3
		200 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	200 mg/m3
		40 ppm
	TWA	120 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	620 mg/m3
		250 ppm
	TWA	500 mg/m3
		200 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	VLE	125 mg/m3
Regulatory status: Indicative limit (VL)		
		25 ppm
Regulatory status: Indicative limit (VL)		
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	VLE	980 mg/m3
Regulatory status: Indicative limit (VL)		
		400 ppm
Regulatory status: Indicative limit (VL)		

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
2-Hydroxy-1,2,3-propanetric arboxylic acid (CAS 77-92-9)	TWA	2 mg/m3	Inhalable fraction.
2-methylpentane-2,4-diol (CAS 107-41-5)	TWA	49 mg/m3	Vapour and aerosol.
		10 ppm	Vapour and aerosol.
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	500 mg/m3	
		200 ppm	

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
2-Hydroxy-1,2,3-propanetric arboxylic acid (CAS 77-92-9)	AGW	2 mg/m3	Inhalable fraction.
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	AGW	500 mg/m3	
		200 ppm	

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	125 mg/m3
		25 ppm
	TWA	125 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3
		500 ppm
	TWA	980 mg/m3
		400 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
	TWA	500 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	125 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	490 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
		200 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	125 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

Italy. Occupational Exposure Limits

Components	Type	Value	Form
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
	TWA	350 mg/m3
Sodium sulfate (CAS 7757-82-6)	TWA	10 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	120 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	100 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TLV	245 mg/m3
		100 ppm

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value	Form
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	100 mg/m3	Inhalable fraction and vapour.
		0 ppm	Inhalable fraction and vapour.
	TWA	50 mg/m3	Inhalable fraction and vapour.

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value	Form
		0 ppm	Inhalable fraction and vapour.
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1200 mg/m3	
		0 ppm	
	TWA	900 mg/m3	
		0 ppm	

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	500 mg/m3
		203 ppm
	TWA	200 mg/m3
		81 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	500 mg/m3
		200 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	123 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	120 mg/m3
		25 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
2-Hydroxy-1,2,3-propanetric arboxylic acid (CAS 77-92-9)	STEL	4 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	98 mg/m3	Vapour and aerosol.
		20 ppm	Vapour and aerosol.
	TWA	49 mg/m3	Vapour and aerosol.
		10 ppm	Vapour and aerosol.
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3	
		400 ppm	
	TWA	500 mg/m3	
		200 ppm	

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	123 mg/m3
		25 ppm
	TWA	123 mg/m3
		25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1250 mg/m3
		500 ppm
	TWA	999 mg/m3
		400 ppm

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	50 mg/l	Acetone	Urine	*
	50 mg/l	Acetone	Blood	*
	0,86 umol/l	Acetone	Urine	*
	0,86 umol/l	Acetone	Blood	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*
	25 mg/l	ACETON	Blood	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 µg/l	Acetone	Urine	*
	430 µmol/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	40 mg/l	Acetona	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*
	25 mg/l	ACETON	Blood	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

Germany DFG MAK (advisory): Skin designation

bronopol (INN) (CAS 52-51-7) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Eye protection should meet standard EN 166.

Skin protection

- Hand protection Wear appropriate chemical resistant gloves. Wear suitable gloves tested to EN374.

- Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Follow guidance on selection, use, care and maintenance in accordance with EN 529.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure controls Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.

Form Liquid.

Colour Light yellow.

Odour	Not established.
Melting point/freezing point	0 °C (32 °F) estimated
Boiling point or initial boiling point and boiling range	100 °C (212 °F) estimated
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Non-flammable.
Explosive limit – upper (%)	Non-flammable.
Flash point	Non-flammable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
pH	1,5 - 2
Kinematic viscosity	Property has not been measured.
Solubility(ies)	
Solubility (water)	Soluble.
Partition coefficient (n-octanol/water)	Not applicable.
Vapour pressure	Property has not been measured.
Vapour density	Property has not been measured.
Relative density	0,9 - 1,1
Particle characteristics	Not available.
9.2. Other information	
9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
9.2.2. Other safety characteristics	
Evaporation rate	Property has not been measured.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

SECTION 10: Stability and reactivity

10.1. Reactivity	Reacts violently with strong alkaline substances. This product may react with reducing agents. May be corrosive to metals.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials. Do not mix with other chemicals.
10.5. Incompatible materials	Strong oxidising agents. Metals.
10.6. Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes mild skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.
11.1. Information on toxicological effects	
Acute toxicity	Not expected to be acutely toxic.

Product	Species	Test Results
Sani-Cide EX3 Concentrate (EU only)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Inhalation		
Aerosol		
LC50	Rat	> 2 mg/l, 4 Hours No mortality. No toxicological impacts.
Oral		
ATEmix		2700 mg/kg

Components	Species	Test Results
1 -phenoxy-2-propanol (CAS 770-35-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	-	> 5400 mg/m3, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
2-Hydroxy-1,2,3-propanetricarboxylic acid (CAS 77-92-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	6700 mg/kg
4-dodecan-3-ylbenzenesulfonic acid (CAS 68584-22-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Alcohols, C9-11, branched and linear, ethoxylated (CAS 68439-46-3)		
Acute		
Inhalation		
Vapour		
LC50	Rat	> 100 mg/m3, 6 Hours
bronopol (INN) (CAS 52-51-7)		
Acute		
Inhalation		
LC50	-	> 5 mg/l, 6 Hours
Linalyl Acetate (CAS 115-95-7)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	> 9000 mg/kg
N-(n-octyl)-2-pyrrolidone (CAS 2687-94-7)		
Acute		
Oral		
LD50	Rat	2,1 g/kg

Skin corrosion/irritation Based on available data, the classification criteria are not met. Prolonged skin contact may cause temporary irritation.

Primary Irritation Index (P.I.I.): 1.7 - 2.0 @ 24, 48 & 72 hours; reversible

Corrosivity

Sani-Cide EX3 Concentrate (EU only)	EPA P326 Result: Mild skin irritation. Species: Rabbit Observation Period: 14 days

Serious eye damage/eye irritation Causes serious eye damage.

Corneal opacity ≥1, not fully reversed in 21 days in at least one animal.

Eye

Sani-Cide EX3 Concentrate (EU only)	EPA P324 Result: Irreversible effects on the eye. Species: Rabbit Observation Period: 21 days

Respiratory sensitisation Not a respiratory sensitiser.

Skin sensitisation May cause an allergic skin reaction.

Skin Sensitisation

Sani-Cide EX3 Concentrate (EU only)	EPA P327 Result: Sensitiser. Species: Mouse

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard. Not an aspiration hazard.

Mixture versus substance information No information available.

11.2. Information on other hazards

Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Components		Species	Test Results
4-dodecan-3-ylbenzenesulfonic acid (CAS 68584-22-5)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	>= 4,66 - <= 6,83 mg/l, 48 hours
Alcohols, C9-11, branched and linear, ethoxylated (CAS 68439-46-3)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	>= 2,9 - <= 8,5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	>= 6 - <= 12 mg/l, 96 hours
L-(+)-lactic acid (CAS 79-33-4)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	>= 180 - <= 320 mg/l, 48 hours

12.2. Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

2-Hydroxy-1,2,3-propanetricarboxylic acid	-1,64
Linalyl Acetate	3,93

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not established.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN1760

14.2. UN proper shipping name CORROSIVE LIQUID, N.O.S. (Sodium octane-1-sulphonate monohydrate, L-(+)-lactic acid)

14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

Label(s) 8

Hazard No. (ADR) 80

Tunnel restriction code E

14.4. Packing group III

14.5. Environmental hazards Yes

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number UN1760

14.2. UN proper shipping name CORROSIVE LIQUID, N.O.S. (Sodium octane-1-sulphonate monohydrate, L-(+)-lactic acid)

14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

Label(s) 8

14.4. Packing group III

14.5. Environmental hazards Yes

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number UN1760

14.2. UN proper shipping name CORROSIVE LIQUID, N.O.S. (Sodium octane-1-sulphonate monohydrate, L-(+)-lactic acid)

14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

Label(s) 8

14.4. Packing group III

14.5. Environmental hazards Yes

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN1760

14.2. UN proper shipping name Corrosive liquid, n.o.s. (Sodium octane-1-sulphonate monohydrate, L-(+)-lactic acid)

14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards Yes

ERG Code 8L

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1760

14.2. UN proper shipping name CORROSIVE LIQUID, N.O.S. (Sodium octane-1-sulphonate monohydrate, L-(+)-lactic acid), MARINE POLLUTANT

14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards

Marine pollutant Yes

EmS F-A, S-B

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments This product is not intended to be transported in bulk.

ADN; ADR; IATA; IMDG; RID

Marine pollutant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

EU Regulation 648/2004, Annex VII, Content Labeling for Detergents

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

bronopol (INN) (CAS 52-51-7)
N-(n-octyl)-2-pyrrolidone (CAS 2687-94-7)

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

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.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MAC: Maximum Allowed Concentration.
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VLE: Exposure Limit Value.
VME: Exposure Average Value.
vPvB: Very persistent and very bioaccumulative.

References	ECHA registered substances database
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text. Celeste Industries cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.