

Safety Data Sheet

according to Regulation (EU) 2015/830
Issue date: 5/15/2020 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : EKOSPRAY OPEN CELL
Product code : 20004435

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
Use of the substance/mixture : Polyurethane

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bang & Bonsomer Group Oy
Itälahdenkatu 18 A
P.O. Box 93
00211 Helsinki - Finland
T +3589681081
REACH@bangbonsomer.com - <http://www.bangbonsomer.com>

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
Finland	Myrkytystietokeskus	Stenbäckinkatu 9 PO BOX 100 29 Helsinki	+358 9 471 977 +358 9 4711	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral) H302
Skin Corr. 1B H314
Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

GHS07

Signal word (CLP) :

Danger

Contains :

Alcohols C9-11, ethoxylated

Hazard statements (CLP) :

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

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- Precautionary statements (CLP)
- : P260 - Do not breathe vapours, spray, mist, gas, fume.
 - P280 - Wear protective clothing, eye protection, face protection.
 - P301+P312 - IF SWALLOWED: Call a POISON CENTER, doctor if you feel unwell.
 - P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 - P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 - P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P501 - Dispose of contents and container to in accordance with local regulations.

2.3. Other hazards

No additional information available

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]
Tris(2-chloro-1-methylethyl)phosphate	(CAS-No.) 13674-84-5 (EC-No.) 237-158-7 (REACH-no) 01-2119486772-26	10 – 25	Acute Tox. 4 (Oral), H302
Alcohols C9-11, ethoxylated	(CAS-No.) 68439-46-3	10 – 25	Eye Dam. 1, H318
Ethanol, 2-[2-(dimethylamino)ethoxy]-	(CAS-No.) 1704-62-7 (EC-No.) 216-940-1	5 – 10	Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314
Bis(Dimethylaminoethyl)ether	(CAS-No.) 3033-62-3 (EC-No.) 221-220-5	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314
2-[[2-(Dimethylamino)ethyl]methylamino]ethanol	(CAS-No.) 2212-32-0 (EC-No.) 218-658-4	1 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Show this safety data sheet to the doctor in attendance.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
- 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 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.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. Rinse mouth out with water. Drink plenty of water. Do NOT induce vomiting.

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

- Symptoms/effects : Causes severe skin burns and eye damage.
- Symptoms/effects after ingestion : Harmful if swallowed.

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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. Use extinguishing agent suitable for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous decomposition products in case of fire: : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Nitrogen oxides. Polonium (Po). Silicon oxides.

5.3. Advice for firefighters

- Precautionary measures fire : Stop leak if safe to do so. Evacuate area. Cool down the containers exposed to heat with a water spray.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area. No flames, no sparks. Eliminate all sources of ignition. Avoid contact with skin and eyes. Stop leak if safe to do so. Avoid breathing dust, mist or spray.

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. 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. Do not allow into drains or water courses.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- 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

- Additional hazards when processed : Avoid formation of vapours. Handle and open container with care. Handle empty containers with care because residual vapours are flammable. Vapours are heavier than air and may spread along floors. Vapours may form flammable mixture with air. Product may become electrostatically charged - provide earthing of containers, equipment, pumps and ventilation facilities. Take precautionary measures against static discharge.
- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

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Hygiene measures : 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 in a well-ventilated place. Keep cool. Hygroscopic product. Keep container tightly closed. Keep only in original container. Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Do not breathe dust. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Do not eat, drink or smoke in areas where product is used. Wash hands before breaks and after work. Take off contaminated clothing.

Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Combined gas/dust mask with filter type P3.

Materials for protective clothing:

Wear suitable protective clothing

Hand protection:

Protective gloves. Standard EN 374 - Protective gloves against chemicals.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Chloroprene rubber (CR)				EN ISO 374

Eye protection:

Standard EN 166 - Personal eye-protection. Safety glasses with face shield. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Device	Filter type	Condition	Standard
Particle filter, Gas filters			

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless, yellowish.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 0 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 120 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: < 30 mbar
Relative vapour density at 20 °C	: No data available
Relative density	: 1.12 g/cm ³ , 25 C
Solubility	: partly soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 210 mPa·s 25 C
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

Reacts with isocyanates.

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

Avoid static electricity discharges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

galvanized surfaces. ferrous metal. Base metals and alloys.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides. Polonium (Po). Hydrogen. Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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ATE CLP (oral)	500 mg/kg bodyweight

Tris(2-chloro-1-methylethyl)phosphate (13674-84-5)	
LD50 oral rat	1500 mg/kg NLM_CIP
LD50 dermal rabbit	> 5000 mg/kg IUCLID
LC50 inhalation rat (mg/l)	> 4.6 mg/l 4 h, OECD_SIDS

Alcohols C9-11, ethoxylated (68439-46-3)	
LD50 oral rat	≥ 5000 mg/kg
LD50 dermal rabbit	≥ 5000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	≥ 50 mg/l/4h

Bis(Dimethylaminoethyl)ether (3033-62-3)	
LD50 oral rat	910 mg/kg
LD50 dermal rabbit	238 mg/kg
LC50 inhalation rat (mg/l)	177 ppm, 6h

Ethanol, 2-[2-(dimethylamino)ethoxy]- (1704-62-7)	
LD50 oral rat	2460 µl/kg

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious eye damage
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

Alcohols C9-11, ethoxylated (68439-46-3)	
NOAEL (animal/male, F0/P)	250 mg/kg

STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Alcohols C9-11, ethoxylated (68439-46-3)	
NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight/day

Aspiration hazard	: Not classified
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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.
Hazardous to the aquatic environment, short-term (acute)	: Not classified

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Hazardous to the aquatic environment, long-term (chronic) : Not classified

Tris(2-chloro-1-methylethyl)phosphate (13674-84-5)	
LC50 fish 1	56.2 mg/l Brachydanio rerio
LC50 fish 2	98 mg/l Pimephales promelas
EC50 Daphnia 1	63 mg/l IUCLID
EC50 72h algae (1)	45 mg/l Desmodesmus subspicatus, IUCLID
EC50 96h algae (1)	4 mg/l Pseudokirchneriella subcapitata, IUCLID

Alcohols C9-11, ethoxylated (68439-46-3)	
LC50 fish 1	6 – 12 mg/l
LC50 other aquatic organisms 1	140 mg/l activated sludge
EC50 Daphnia 1	2.9 – 8.5 mg/l
EC50 96h algae (1)	1.4 mg/l

12.2. Persistence and degradability

EKOSPRAY OPEN CELL	
Persistence and degradability	Waste water needs to be neutralized before draining of to the purification plant. Expected to be biodegradable.

Alcohols C9-11, ethoxylated (68439-46-3)	
Persistence and degradability	Readily biodegradable.
Biodegradation	72 % 28d

12.3. Bioaccumulative potential

EKOSPRAY OPEN CELL	
Bioaccumulative potential	Bioaccumulation unlikely.

Alcohols C9-11, ethoxylated (68439-46-3)	
BCF fish 1	12.7
Partition coefficient n-octanol/water (Log Pow)	≈ 3.75
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

EKOSPRAY OPEN CELL	
Ecology - soil	partly soluble.

Alcohols C9-11, ethoxylated (68439-46-3)	
Partition coefficient n-octanol/water (Log Koc)	2.7
Ecology - soil	Very slightly soluble.

12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Other adverse effects

Other adverse effects : May cause pH changes in aqueous ecological systems. Do not contaminate ground and surface water. Avoid discharge to the environment. The product contains organic halogens.

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

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Rail 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 no substance on the REACH candidate list

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.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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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

Other information : 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.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
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
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

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