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**Section 1: Identification of the substance/mixture and of the company/undertaking**

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**1.1 Product Identifier:** Defense-CX4 Lane Cleaner**Part Number:** 156-8425**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses:** Bowling lane cleaner super concentrate**Uses advised against:** Uses other than those stated; for industrial/professional use only**1.3 Details of the supplier of the safety data sheet:****Supplier:** European Bowling Distribution (EBD)**Address:** Brieltjenspolder 42

4921 PJ Made

The Netherlands

**Telephone:** +31 162 671 084**Email:** [info@eurbowdis.eu](mailto:info@eurbowdis.eu)**Manufacturer:** Kegel LLC**Address:** 1951 Longleaf Blvd

Lake Wales, FL 33859, USA

**Email of the competent person responsible for the Safety Data Sheet**[SDS@kegel.net](mailto:SDS@kegel.net)**1.4 Emergency Phone:** +1 (863) 734-0200 (available from 8 AM – 5 PM EST)

+1 (800) 280-2695 (24 hour; call forwarding service available during non-business hours)

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**Section 2: Hazards identification**

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**2.1 Classification of the substance or mixture:** This mixture is considered hazardous according to (EC) No. 1272/2008 (CLP).**Physical Hazards:** Flammable Liquid Category 3**Health Hazards:** Eye Damage Category 1

Skin Irritation Category 2

Skin Sensitizer Category 1

Acute Toxicity (Inhalation) Category 4

**Environmental Hazards:** Aquatic Chronic Category 2**2.2 Label elements****Pictogram(s)/Symbol(s):** GHS02/Flame; GHS05/Corrosion;  
GHS09/Environment; GHS07/Exclamation Point**Signal Word:** Danger**Hazard statements**

H226: Flammable liquid and vapor

H318: Causes serious eye damage

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H332: Harmful if inhaled

H411: Toxic to aquatic life with long-lasting effects

**Precautionary Statements****Prevention:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharges.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash hand thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P273: Avoid release to the environment.

**Response:** P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378: In case of fire: Use an ABC rated or chemical rated extinguisher to extinguish.

P312: Call a POISON CENTER/doctor if you feel unwell.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302+P352: IF ON SKIN: Wash with plenty of water

P362+P364: Take off contaminated clothing and wash it before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P391: Collect spillage.

**Storage:** P403+P235: Store in a well-ventilated place. Keep cool.

**Disposal:** P501: Dispose of contents and container as required by all local, state, federal and international laws or regulations.

**2.3 Other hazards:** This product does not contain any PBT or vPvB greater than 0,1%.

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### Section 3: Composition/information on ingredients

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**3.1 Substances: Not applicable**

**3.2 Mixture:**

Chemical name*	CAS Number	EC Number	Registration Number	Concentration (weight %)	Classification*
Water	7732-18-5	231-791-2	---	51	Not Classified
Alcohol ethoxylate	Mixture	---	---	24	Acute Oral Toxicity Category 4/H302 Eye Damage Category 1/H318
2-butoxyethanol	111-76-2	203-905-0	---	15	Acute Oral Toxicity Category 4/H302 Acute Dermal Toxicity Category 4/H312 Skin Irritation Category 2/H315 Eye Irritation Category 2/H319 Acute Inhalation Toxicity Category 4/H332
D-limonene	5989-27-5	227-813-5	---	5	Skin Irritation Category 2/H315 Skin Sensitizer Category 1/H317 Acute Aquatic Toxicity Category 1/H400 Chronic Aquatic Toxicity Category 1/H410
Isopropylamine alkylbenzene sulfonic (C9-17 Br)	68649-00-3	272-018-9	---	5	Acute Oral Toxicity Category 4/H302 Skin Irritation Category 2/H315 Eye Irritation Category 2/H319 Acute Aquatic Toxicity Category 2/H401 Chronic Aquatic Toxicity Category 3/H412

\*Occupational Exposure Limit(s), if available, are listed in section 8. See section 16 for the full text of the H phrases declared above.

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### Section 4: First aid measures

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#### 4.1 Description of first aid measures

**Skin Contact:** Wash skin with soap and water. Remove any contaminated clothing and wash clothing before reuse. If irritation persists, seek medical attention.

**Eye Contact:** Flush eyes thoroughly with water while holding eyes open for at least 15 minutes. If wearing contact lenses, remove lenses and flush eyes for several minutes. If discomfort persists, seek medical attention.

**Ingestion:** Do not induce vomiting unless directed to do so by medical professional. Treat symptomatically. Seek medical attention as necessary. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove victim to fresh air. Obtain medical attention. Qualified personnel may give oxygen if breathing is difficult or cyanosis (blue discoloration of the skin) is noted. Give artificial respiration if subject is not breathing.

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

**Skin Absorption:** Harmful effects are not expected from short periods of contact. Prolonged or repeated contact may lead to skin irritation by dermatitis including swelling, redness, drying, itching and cracking.

**Eye Contact:** Harmful effects are not expected from short periods of contact. Eye irritation including redness and tearing may occur. Corneal inflammation may also occur.

**Ingestion:** Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury. Ingestion may cause gastrointestinal irritation, nausea and diarrhea. Product ingested in large quantities in concentrated form may cause toxic effects.

**Inhalation:** This product is not likely to cause an inhalation hazard at normal temperatures and pressures. Inhalation of mist or spray may be harmful and may cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of mist at airborne levels above the recommended exposure limit. Aspiration may cause pulmonary edema or aspiration pneumonia.

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

If you feel unwell, seek medical advice/attention. Show physician this safety data sheet.

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### Section 5: Firefighting measures

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#### 5.1 Extinguishing Media

**Suitable:** Use CO<sub>2</sub>, dry powder, universal-type foam, and water fog

**Unsuitable:**

**5.2 Special hazards arising from the substance/mixture:** Pressure increases may cause container to burst and material may spatter.

#### 5.3 Advice for firefighters

**Special Fire Fighting Procedures:** Use water spray to cool fire-exposed containers and structures.

**Special Protective Equipment for Firefighters:** Wear full protective gear and an approved self-contained breathing apparatus with full face-piece operated in positive pressure mode.

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### Section 6: Accidental release measures

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**6.1 Personal precautions, protective equipment and emergency procedures:** Wear protective clothing including gloves and eye protection when taking up spills. Eliminate any ignition sources. Evacuate untrained personnel.

**6.2 Environmental precautions:** Prevent from entering sewers or drains.

**6.3 Methods and material for containment and cleaning up:** Floor may be slippery. Use care to avoid falling. Cover drains and use spill dams to prevent material from spreading. Absorb spill on an inert material such as sand, earth, or vermiculite. Universal sorbent pads may also be used. Small spills can be mopped away with water. Never return spills to original container for re-use. Spill clean-up materials should be collected in appropriately labeled containers for disposal. Dispose of material as required by all applicable regulations and laws.

**6.4 Reference to other sections:** See section 8 for personal protective equipment and section 13 for disposal considerations.

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### Section 7: Handling and storage

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**7.1 Precautions for safe handling:** Keep containers tightly closed to prevent contamination. Wear suitable personal protective equipment including gloves and splash resistant eye protection. Wash hands after use.

**7.2 Conditions for safe storage, including any incompatibilities:** Normal precautions should be followed in handling and storage. Keep away from heat and flame. Keep container tightly closed. Freezing of product may rupture container. Product shelf life is best retained by storage between 20°C and 32°C (68°F - 90°F).

**7.3 Specific end use(s):** Bowling lane cleaner

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## Section 8: Exposure controls/personal protection

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### 8.1 Control parameters

#### Exposure limits/standards

Substance: 2-butoxyethanol CAS No.: 111-76-2				
Country	Limit Value (8 hours)	Limit Value (Short term)	Form	Source
Austria	98 mg/m <sup>3</sup>	200 mg/m <sup>3</sup>		
Belgium	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		
Denmark	98 mg/m <sup>3</sup>	196 mg/m <sup>3</sup>		
European Union	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		IOELV
Finland	98 mg/m <sup>3</sup>	250 mg/m <sup>3</sup> (15 min. avg.)		
France	49 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		Restrictive statutory limit values Skin
Germany	49 mg/m <sup>3</sup>	196 mg/m <sup>3</sup> (15 min. avg.)		AGS
Germany	49 mg/m <sup>3</sup>	98 mg/m <sup>3</sup> (15 min. avg.)		DFG
Hungary	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>		
Ireland	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. reference period)		
Italy	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>		
Latvia	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		
Poland	98 mg/m <sup>3</sup>	200 mg/m <sup>3</sup>		
Romania	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		
Spain	98 mg/m <sup>3</sup>	245 mg/m <sup>3</sup>		
Sweden	50 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		
Switzerland	49 mg/m <sup>3</sup>	98 mg/m <sup>3</sup>		
The Netherlands	100 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>		
Turkey	98 mg/m <sup>3</sup>	246 mg/m <sup>3</sup> (15 min. avg.)		
United States	240 mg/m <sup>3</sup>			OSHA PEL
United Kingdom	123 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>		

### 8.2 Exposure controls

**8.2.1 Appropriate engineering controls:** Mechanical ventilation is suggested but not normally necessary under normal usage of product.

**8.2.2 Individual protection measures, such as personal protective equipment**

**8.2.2.1 Eye and face protection:** Appropriate eye protection should always be worn when handling chemicals. Splash resistant eyewear is recommended when splashing is a concern.

**8.2.2.2 Skin protection:** Wear chemical resistant gloves and protective clothing, such as long sleeves, to minimize skin contact.

**8.2.2.3 Respiratory protection:** No special respiratory protection is required with normal usage of product.

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## Section 9: Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

**Appearance:** Water clear liquid with orange color

**Odor:** Solvent, citrus-like odor

**Odor threshold:** Not determined

**pH:** 12,8 @ 20°C

**Melting/freezing point:** Not determined

**Initial boiling point:** Not determined

**Distillation temperature (90%):** Not determined

**Flash point:** 54°C (129,2°F) by PMCC

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not determined

**Explosive limits:** Not determined

**Vapor pressure:** Not determined

**Vapor density:** Not determined

**Relative density (H<sub>2</sub>O=1):** 1,028 @ 20°C

**Solubility in H<sub>2</sub>O:** Soluble

**Partition coefficient (n-octanol/water):** Not determined

**Auto Ignition temp.:** Not determined

**Decomposition temp.:** Not determined

**Viscosity (cps):** Not determined

**Explosive properties:** Not determined

**Oxidizing properties:** Not determined

**Fire Point:** >100°C (>212°F) by COC

## 9.2 Other information

Information not available

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## Section 10: Stability and reactivity

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**10.1 Reactivity:** Non-reactive when used according to specifications

**10.2 Chemical stability:** Stable under normal ambient conditions

**10.3 Possibility of hazardous reactions:** None under conditions of normal use.

**10.4 Conditions to avoid:** Avoid high heat, flames and sparks as a precaution.

**10.5 Incompatible materials** Product is normally unreactive.

**10.6 Hazardous decomposition products:** Burning can produce various oxides and vapors that are potentially dangerous to health.

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## Section 11: Toxicological information

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**11.1 Information on toxicological effects:** This product has not undergone animal lab testing to determine toxicity. Toxicological data and local effects provided for primary substance(s) in the mixture.

Acute toxicity: Does not meet the criteria for oral or dermal classification. Harmful if inhaled.

Chemical Name (CAS #)	Oral LD50 (method)	Dermal LD50 (method)	Inhalation LC50 (method)
Alcohol ethoxylate (mixture)	1900 mg/kg (rat)	3000 mg/kg (rat)	---
2-butoxyethanol (111-76-2)	1414 mg/kg (Guinea pig) (OECD 401)	2000 mg/kg (Guinea pig) (OECD 402)	2.56 mg/L (rat) (OECD 403)
Isopropylamine alkylbenzene sulfonic (C9-17 Br) (68649-00-3)	1800 mg/kg (rat)	4000 mg/kg (rabbit)	---

Skin corrosion/irritation: Causes skin irritation

Chemical Name (CAS #)	Result	Species	Method
2-butoxyethanol (111-76-2)	Irritating to skin	Rabbit	EU Method B.4
Isopropylamine alkylbenzene sulfonic (C9-17 Br) (68649-00-3)	Irritating to skin		Manufacturer specification

Serious eye damage/irritation: Causes serious eye damage.

Chemical Name (CAS #)	Result	Species	Method
Alcohol ethoxylate (mixture)	Corrosive to eye		Manufacturer specification

Respiratory or skin sensitization: May cause an allergic skin reaction.

Chemical Name (CAS #)	Result	Species	Method
D-limonene (5989-27-5)	Sensitizing to skin	Mouse	OECD 429

Germ cell mutagenicity: Does not meet the criteria for classification.

Carcinogenicity: Does not meet the criteria for classification.

Reproductive toxicity: Does not meet the criteria for classification.

Specific Target Organ Toxicant Single Exposure (STOT-SE): Does not meet the criteria for classification.

Specific Target Organ Toxicant Repeated Exposure (STOT-RE): Does not meet the criteria for classification.

Aspiration hazard: Does not meet the criteria for classification.

**Numerical measures of toxicity:** The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral):** 3419 mg/kg

**ATEmix (dermal):** 4200 mg/kg

**ATEmix (inhalation-vapors):** 1,2 mg/L

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## Section 12: Ecological information

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**12.1 Toxicity:** There is no eco-toxicity data available for this mixture. This product should be kept out of sewage and drainage systems and all bodies of water as the mixture is toxic to aquatic life with long-lasting effects based on the predominant substance(s).

Chemical Name (CAS #)	Vertebrates LC50 (method)	Invertebrates EC50 (method)	Algae EC50 (method)
D-limonene (5989-27-5)	0,72 mg/L (OECD 203)	0,85 mg/L (OECD 202)	0,32 mg/L (OECD 201)
Isopropylamine alkylbenzene sulfonic (C9- 17 Br) (68649-00-3)	20 mg/L (Manufacturer specification)	2,2 mg/L (Manufacturer specification)	5 mg/L (Manufacturer specification)

**12.2 Persistence and degradability:** Biodegradability has not been determined for the mixture.

Chemical Name (CAS #)	Result	Degradability	Method
2-butoxyethanol (111-76-2)	Readily biodegradable		OECD 301 B

**12.3 Bioaccumulative potential:** Data not available for mixture

**12.4 Mobility in soil:** Data not available for mixture

**12.5 Results of PBT and vPvB assessment:** Mixture does not contain any PBT or vPvB substances at greater than 0,1%.

**12.6 Other adverse effects:** Unknown

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### Section 13: Disposal considerations

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**13.1 Waste treatment methods:** Dispose of all contents/container in accordance with appropriate international, federal, state and local environmental control regulations. Collect and reclaim or dispose in sealed containers at a licensed waste disposal site. The material may be collected at a licensed and approved chemical collection and disposal facility. Empty containers should be taken to an approved waste facility for recycling or disposal.

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### Section 14: Transport information

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	ADR/RID (Road/Rail Transport)	IMDG/IMO (Sea Transport)	IATA/ICAO (Air Transport)
<b>14.1 UN number</b>	Not regulated (exception: UN ADR 2.2.3.1.1 Note 1)	Not regulated (exception: IMO IMDG 2.3.1.3.2)	Not regulated (exception: IATA DGR 3.3.1.3(b))
<b>14.2 UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.3 Transport hazard class</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.4 Packing group</b>	None	None	None
<b>14.5 Environmental hazards</b>	None	None	None

**14.6 Special precautions for user:** Always transport in closed containers that are upright and secure to prevent accidental spillage.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Not applicable

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### Section 15: Regulatory information

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

**REACH Regulation (EC) No 1907/2006**

This mixture contains only components that have been registered, are exempt from registration, or are regarded as registered according to Regulation (EC) No. 1907/2006 (REACH).

Seveso Directive 2012/18/EC – Listed in regulation: None

**15.2 Chemical safety assessment:** No chemical safety assessment has been carried out for this mixture.

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### Section 16: Other information

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Full text of H-phrases, if any, appearing in section 3:

H226: Flammable liquid and vapor.  
H312: Harmful in contact with skin.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long-lasting effects.

H302: Harmful if swallowed.  
H315: Causes skin irritation.  
H318: Causes serious eye damage.  
H332: Harmful if inhaled.  
H401: Toxic to aquatic life.  
H412: Harmful to aquatic life with long-lasting effects.

#### HMIS III Rating

Health: 2  
Flammability: 2  
Physical Hazard: 0  
Personal Protective Equipment (PPE): D

#### NFPA Rating

Health: 2  
Flammability: 2  
Reactivity: 0  
Special Hazards: None

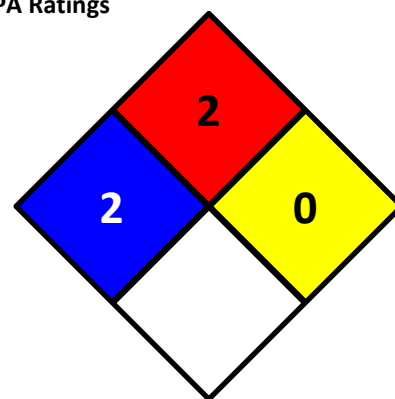
#### Hazard Rating Legend

0: Minimal Hazard  
1: Slight Hazard  
2: Moderate Hazard  
3: Serious Hazard  
4: Severe Hazard

#### HMIS III Ratings

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>2</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>PPE</b>	<b>D</b>

#### NFPA Ratings



SDS: Defense-CX4 Lane Cleaner

Product ID: 156-8425

SDS Revision Level: 1.0

SDS Revision Date: 11 October 2019

Revision Reason(s): New SDS

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