

SAFETY DATA SHEET

Kenair Lens Cleaner – KENR013

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

1.1. Product identifier

Product name Lens Cleaner

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

Identified uses LENS/GLASSES CLEANER PC35 Washing and cleaning products

1.3. Details of the supplier of the safety data sheet

Supplier Kenro Ltd
Greenbridge Road
Swindon
Wiltshre
SN3 3LH
T+44 (0) 1793 615836
sales@kenro.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0)1793 615836 (Monday to Friday, 8.30am to 5pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Eye Irrit. 2 - H319

Environmental hazards Not Classified

Human health Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment

Physicochemical Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated.
H319 Causes serious eye irritation.

Kenair Lens Cleaner

Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P211 Do not spray on an open flame or other ignition source.</p> <p>P251 Do not pierce or burn, even after use.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</p> <p>P102 Keep out of reach of children.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P501 Dispose of contents/ container in accordance with local regulations.</p>
Detergent labelling	≥ 30% aliphatic hydrocarbons, < 5% perfumes, Contains Linalol Synthetic

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS	30-60%
CAS number: 68476-85-7 EC number: 270-704-2	
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280	
ETHANOL	30-60%
CAS number: 64-17-5 EC number: 200-578-6 REACH registration number: 01-2119457610-43	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319	
PROPAN-2-OL	10-30%
CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once.
Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.

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Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Extremely flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up.
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5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray on a naked flame or any incandescent material.
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7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

ETHANOL (CAS: 64-17-5)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Short term : 1900 mg/m ³ Industry - Dermal; Long term : 343 mg/kg/day Industry - Inhalation; Long term : 950 mg/m ³ Consumer - Inhalation; Short term : 950 mg/m ³ Consumer - Dermal; Long term : 206 mg/kg/day Consumer - Inhalation; Long term : 114 mg/m ³ Consumer - Oral; Long term : 87 mg/kg/day
PNEC	- Fresh water; 0.96 mg/l - Marine water; 0.79 mg/l - Sediment; 3.6 mg/kg - Soil; 0.62 mg/kg - STP; 580 mg/l - STP; 580 mg/l - Intermittent release; 2.75 mg/l - Sediment (Marinewater); 2.9 mg/kg - Soil; 0.63 mg/kg - ;

PROPAN-2-OL (CAS: 67-63-0)

DNEL	Industry - Dermal; Long term systemic effects: 888 mg/kg/day Industry - Inhalation; Long term systemic effects: 500 mg/m ³ Consumer - Dermal; Long term systemic effects: 319 mg/kg/day Consumer - Dermal; Long term systemic effects: 26 mg/kg/day Consumer - Inhalation; Long term systemic effects: 89 mg/m ³
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PNEC	<ul style="list-style-type: none"> - Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Intermittent release; 140.9 mg/l - Sediment (Freshwater); 552 mg/kg - Sediment (Marinewater); 552 mg/kg - STP; 2251 mg/l - Soil; 28 mg/kg
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8.2. Exposure controls

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.
Personal protection	When using do not smoke.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.
Hand protection	Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
Hygiene measures	Wash hands after handling. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless to pale yellow.
Odour	Characteristic.
Initial boiling point and range	-40 to -2°C @ 1013 hPa
Flash point	<-40°C
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.8% Upper flammable/explosive limit: 9.5%
Vapour pressure	ca. 590 to 1760 kPa @ 45°C
Vapour density	ca. 1.5 at 15°C
Auto-ignition temperature	410 - 580°C
Comments	Information given is applicable to the major ingredient.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 629 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability Avoid the following conditions: Heat, sparks, flames.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Keep away from oxidising materials, heat and flames.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information	Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.
Inhalation	In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.
Skin contact	Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
Acute and chronic health hazards	Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Route of exposure	Inhalation
Target organs	Central nervous system Respiratory system, lungs
Medical symptoms	Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.

ETHANOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 10,470.0

Species Rat

ATE oral (mg/kg) 10,470.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

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Species	Rabbit
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	51.0
Species	Rat
ATE inhalation (vapours mg/l)	51.0
<u>Skin corrosion/irritation</u>	
Animal data	Erythema/eschar score: Very slight erythema - barely perceptible (1)., Well defined erythema (2). Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation. Rabbit
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Not sensitising. Guinea pig: Not sensitising. Mouse, Rat: Not sensitising.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL >4000 mg/kg/day, Oral, Mouse NOAEL >3000 mg/kg/day, , Rat
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	- NOAEL 21.5 mg/kg/day, , Mouse P - NOAEL 13.8 mg/kg/day, , Mouse F1
Reproductive toxicity - development	Teratogenicity: - LOAEL: 8200 mg/kg/day, , Rat Developmental toxicity: - NOAEL: 5200 mg/kg/day, , Rat Maternal toxicity: - : ≥ 20000 , , Teratogenicity: - NOAEL: 16000 ppm, , Rat
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met. NOAEL 1730 mg/kg/day, Oral, Rat, Liver NOAEL > 20 mg/l, Inhalation, Rat
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
Skin contact	Not a skin sensitiser. No specific health hazards known.
Eye contact	Irritating to eyes. Irritation of nose, throat and airway.
Route of exposure	Inhalation Ingestion.
Target organs	Gastro-intestinal tract Liver

PROPAN-2-OL

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	5,840.0

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Species	Rat
Notes (oral LD₅₀) Acute toxicity - dermal	Low order of acute toxicity.
Acute toxicity dermal (LD₅₀ mg/kg)	16.4
Species	Rabbit
Notes (dermal LD₅₀) Acute toxicity - inhalation	Low order of acute toxicity.
Notes (inhalation LC₅₀) Skin corrosion/irritation	6 hours. Not
Animal data Respiratory sensitisation	irritating. Not
Respiratory sensitisation	available.
Germ cell mutagenicity	Negative.
Genotoxicity - in vitro Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Inhalation	Drowsiness, dizziness, disorientation, vertigo.
Ingestion	No specific health hazards known.
Skin contact	No specific health hazards known.
Eye contact	Irritating to eyes.

Denatonium benzoate

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	584.0
Species	Rat
ATE oral (mg/kg)	584.0

Indole

<u>Acute toxicity - oral</u>	
ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
ATE dermal (mg/kg)	300.0

Isoeugenol

Acute toxicity - oral

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ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
ATE dermal (mg/kg)	1,100.0

SECTION 12: Ecological Information

Ecotoxicity No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

Ecological information on ingredients.

ETHANOL

Ecotoxicity Not regarded as dangerous for the environment.

PROPAN-2-OL

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

Toxicity Not available.

Ecological information on ingredients.

ETHANOL

Toxicity Not available.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 48 hours: > 100 mg/l, *Leuciscus idus* (Golden orfe)
 LC₅₀, 96 hours: 15300 mg/l, *Pimephales promelas* (Fat-head Minnow)
 LC₅₀, 24 hours: 11200 mg/l, *Salmo gairdneri*
 LC₅₀, 96 hours: 13000 mg/l, *Oncorhynchus mykiss* (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 12340 mg/l, *Daphnia magna*
 EC₅₀, 24 hours: 858 mg/l, *Artemia salina*
 LC₅₀, 48 hours: 5012 mg/l, *Ceriodaphnia dubia* (water flea)

Acute toxicity - aquatic plants EC₅₀, 72 hours: 275 mg/l, Freshwater algae, *Chlorella vulgaris*
 EC₂₀, 72 hours: 11.5 mg/l, *Chlorella vulgaris*

Acute toxicity - microorganisms EC₅₀, 4 hours: 5800 mg/l, *Paramecium caudatum*

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 30 days: 245 mg/l,

Chronic toxicity - aquatic invertebrates NOEC, 10 days: 9.6 mg/l, *Ceriodaphnia dubia* (water flea)
 NOEC, 12 days: 79 mg/l, *Palaemonetes pugio*

PROPAN-2-OL

Toxicity Not available.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 9640 mg/l, *Pimephales promelas* (Fat-head Minnow)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , : > 1000 mg/l, Daphnia magna 24 hours
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 1000 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC ₅₀ , : > 1000 mg/l, Activated sludge

Denatonium benzoate

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: > 1000 mg/l, Salmo gairdneri
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 13 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability Not available.

Ecological information on ingredients.

ETHANOL

Stability (hydrolysis)	No significant reaction in water.
Biodegradation	Water - Degradation (%) 70: > 5 days The substance is readily biodegradable. Water and sediment - Degradation 97%: 28 days
Biological oxygen demand	100 mg/g
Chemical oxygen demand	1900 mg/g

PROPAN-2-OL

Persistence and degradability	Not available.
Biodegradation	Degradation (%) - Degradation (%) 95: 21 days

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Ecological information on ingredients.

ETHANOL

Bioaccumulative potential	Not available.
Partition coefficient	log Kow: -0.32

PROPAN-2-OL

Bioaccumulative potential	Not available.
Partition coefficient	log Pow: 0.05

12.4. Mobility in soil

Lens Cleaner

Mobility Not known.

Ecological information on ingredients.

ETHANOL

Mobility The product is soluble in water. The product contains organic solvents which will evaporate easily from all surfaces. This product is poorly adsorbed onto soils or sediments.

PROPAN-2-OL

Mobility Not known.

Adsorption/desorption coefficient Water - Koc: ~ 1.1 @ °C

Henry's law constant 0.00000338 atm m³/mol @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

Ecological information on ingredients.

ETHANOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

PROPAN-2-OL

Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects

Other adverse effects Not available.

Ecological information on ingredients.

ETHANOL

Other adverse effects Avoid releasing into the environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid subsoil penetration.

PROPAN-2-OL

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty.

Lens Cleaner

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

Transport labels



14.4. Packing group

ADR/RID packing group	None
IMDG packing group	None
ADN packing group	None
ICAO packing group	None

14.5. Environmental hazards

Lens Cleaner

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-D, S-U
ADR transport category	2
Tunnel restriction code	(D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010.
Guidance	Workplace Exposure Limits EH40. CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Revised classification.
Revision date	01/08/2017
Revision	3
SDS number	10875
SDS status	Approved.
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.