

SAFETY DATA SHEET

CRL S50 Glass Cleaner

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of 1	the substance/mixture and of the company/undertaking		
1.1. Product identifier			
Product name	CRL S50 Glass Cleaner		
Product number	S50		
1.2. Relevant identified uses of	of the substance or mixture and uses advised against		
Identified uses	Glass cleaner.		
Uses advised against	No specific uses advised against are identified.		
1.3. Details of the supplier of	1.3. Details of the supplier of the safety data sheet		
Supplier	C. R. Laurence of Europe Charles Babbage Avenue Kingsway Business Park Rochdale OL16 4NW +44 (0) 1706 863600 +44 (0) 1706 869860 crl@crlaurence.co.uk		
1.4. Emergency telephone nu	Imber		
Emergency telephone	00 800 0421 6144 Monday - Friday 08:00 - 17:00		
SECTION 2: Hazards identified	cation		
2.1. Classification of the subs	tance or mixture		
Classification (EC 1272/2008)	-		
Physical hazards	Aerosol 1 - H222, H229		
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319		
Environmental hazards	Not Classified		
2.2. Label elements			
Pictogram			
Signal word	Danger		
Hazard statements	H222 Extremely flammable aerosol.		

Precautionary statements	 P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/ container in accordance with national regulations.
Detergent labelling	< 5% aliphatic hydrocarbons, < 5% disinfectants
Supplementary precautionary statements	 P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P264 Wash contaminated skin thoroughly after handling. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

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		
2-Butoxyethanol		2.5 - <10%
CAS number: 111-76-2	EC number: 203-905-0	
Classification		
Acute Tox. 4 - H302		
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
Dramon 0 al		4 0 50/
Propan-2-ol		1 - 2.5%
CAS number: 67-63-0	EC number: 200-661-7	
Classification		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H336		
Distance		4 0 5%
Butane		1 - 2.5%
CAS number: 106-97-8	EC number: 203-448-7	
Classification		
Flam. Gas 1 - H220		
Press. Gas (Liq.) - H280		
The full text for all hazard statements	s is displayed in Section 16.	
SECTION 4: First aid measures		

4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person.
Skin contact	Rinse with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.
4.2. Most important symptoms	s and effects, both acute and delayed
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Spray/mists may cause respiratory tract irritation.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause discomfort if swallowed.
Skin contact	Redness. Irritating to skin.
Eye contact	Irritating to eyes.
4.3. Indication of any immedia	ate medical attention and special treatment needed
Notes for the doctor	Treat symptomatically.
SECTION 5: Firefighting measurements	sures
5.1. Extinguishing media	
Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire- extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising fr	om the substance or mixture
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.
Hazardous combustion products	Hydrocarbons. Carbon monoxide (CO). Carbon dioxide (CO2).

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautionsDo not touch or walk into spilled material. Keep unnecessary and unprotected personnel away
from the spillage. No smoking, sparks, flames or other sources of ignition near spillage.
Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety
data sheet. Promptly remove any clothing that becomes contaminated. Follow precautions for
safe handling described in this safety data sheet. Ensure procedures and training for
emergency decontamination and disposal are in place. Wash thoroughly after dealing with a
spillage.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Leave small quantities to evaporate, if safe to do so. Large Spillages: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. For waste disposal, see Section 13. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Keep out of the reach of children. Read and follow manufacturer's recommendations. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists. Wear protective clothing as described in Section 8 of this safety data sheet. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Do not pierce or burn, even after use.

Advice on general occupational hygiene 7.2. Conditions for safe storage	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
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Storage precautions	Keep away from oxidising materials, heat and flames. Keep container tightly closed, in a cool, well ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Protect from sunlight. Keep containers upright. Protect containers from damage.
Storage class	Chemical storage.
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

2-Butoxyethanol

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³ Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m³ Sk

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

Butane

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³ Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³ WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls



Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection	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. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Warn cleaning personnel of any hazardous properties of the product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

Decomposition Temperature

9.1. Information on basic phys	ical and chemical properties
Appearance	Aerosol.
Colour	Colourless.
Odour	Not known.
Odour threshold	Not available.
рН	Not available.
Melting point	Not available.
Initial boiling point and range	212°F Estimated value.
Flash point	-104.4°C/-156°F Estimated value.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	0.977 Estimated value.
Solubility(ies)	Not known.
Partition coefficient	Not available.
Auto-ignition temperature	245°C/473°F Estimated value.

Not available.

Viscosity	Not applicable.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
	bes not meet the chiefd for classification as oxidising.
9.2. Other information Other information	None.
SECTION 10: Stability and rea	
10.1. Reactivity	
Reactivity	See the other subsections of this section for further details.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	The following materials may react strongly with the product: Oxidising agents.
10.4. Conditions to avoid	
Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated
10.5. Incompatible materials	
Materials to avoid	Oxidising agents.
10.6. Hazardous decompositio	on products
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
SECTION 11: Toxicological inf	formation
11.1. Information on toxicologi	cal effects
Acute toxicity - oral	
Notes (oral LD ₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	17,460.0
<u>Acute toxicity - dermal</u> Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	11,000.0
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	110.0
Skin corrosion/irritation Animal data	Irritating.
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation Skin sensitisation	Based on available data the classification criteria are not met.	
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.	
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Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.	
IARC carcinogenicity	Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.	
Reproductive toxicity		
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.	
Reproductive toxicity - development	Based on available data the classification criteria are not met.	
Specific target organ toxicity -	single exposure	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.	
Specific target organ toxicity -	repeated exposure	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.	
Aspiration hazard Aspiration hazard	Based on available data the classification criteria are not met.	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	Spray/mists may cause respiratory tract irritation.	
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause discomfort if swallowed.	
Skin contact	Redness. Irritating to skin.	
Eye contact	Irritating to eyes.	
Route of exposure	Ingestion Inhalation Skin and/or eye contact	
Target organs	No specific target organs known.	
Toxicological information on ingredients.		

2-Butoxyethanol

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	1,746.0
Species	Rat
Notes (oral LD₅₀)	REACH dossier information. Harmful if swallowed.
ATE oral (mg/kg)	1,746.0
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Harmful in contact with skin.
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	Harmful if inhaled.
ATE inhalation (vapours mg/l)	11.0
Skin corrosion/irritation	
Animal data	Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: No oedema (0). REACH dossier information. Irritating.
Serious eye damage/irritati	ion
Serious eye damage/irritation	Dose: 0.1 mL, 24 hours, Rabbit Irritating to eyes. REACH dossier information.
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	NOAEC 125 ppm, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL 720 mg/kg/day, Oral, Mouse P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 50 ppm, Inhalation, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
Specific target organ toxici	ty - single exposure
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicit	ty - repeated exposure
STOT - repeated exposure	NOAEL < 69 mg/kg/day, Oral, Rat REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
	Propan-2-ol
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,840.0

	Species	Rat
	ATE oral (mg/kg)	5,840.0
	Acute toxicity - dermal	
	Notes (dermal LD₅o)	LD₅₀ 16.4 mL/Kg, Dermal, Rabbit
	Acute toxicity - inhalation	
	Notes (inhalation LC₅₀)	LC₅₀ >10000 ppm, Inhalation, Vapour, Rat ~6 hours
	Skin corrosion/irritation	
	Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0).
	Serious eye damage/irritation	
	Serious eye damage/irritation	Dose: 0.1 mL, 14 days, Rabbit Causes serious eye irritation.
	Skin sensitisation	
	Skin sensitisation	Buehler test - Guinea pig: Not sensitising.
	Germ cell mutagenicity	
	Genotoxicity - in vitro	Gene mutation: Negative.
	Genotoxicity - in vivo	Chromosome aberration: Negative.
	Carcinogenicity	
	Carcinogenicity	NOEL 5000 ppm, Inhalation, Mouse
	IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
	Reproductive toxicity	
	Reproductive toxicity - fertility	One-generation study - NOAEL 1000 mg/kg/day, Oral, Rat F1
	Reproductive toxicity - development	Developmental toxicity: - NOAEL: 480 mg/kg/day, Oral, Rabbit
	Specific target organ toxici	ty - single exposure
	STOT - single exposure	May cause drowsiness or dizziness.
	Specific target organ toxici	ty - repeated exposure
	STOT - repeated exposure	NOAEC 5000 ppm, Inhalation, Rat
SECTION 1	2: Ecological Information	
Ecotoxicity	-	arded as dangerous for the environment. However, large or frequent spills may have ous effects on the environment.
12.1. Toxicit	<u>y</u>	
Toxicity	Based o	on available data the classification criteria are not met.
Ecological ir	nformation on ingredients.	
		2-Butoxyethanol
	Toxicity	Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.

Acute aq	uatic toxicity	
Acute to	kicity - fish	LC₅₀, 96 hours: 1474 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute to invertebr	kicity - aquatic ates	EC₅₀, 48 hours: 1550 mg/l, Daphnia magna REACH dossier information.
Acute to plants	kicity - aquatic	EC₅₀, 72 hours: 911 mg/l, Pseudokirchneriella subcapitata REACH dossier information.
		Propan-2-ol
Toxicity		Aquatic toxicity is unlikely to occur.
Acute aq	uatic toxicity	
Acute to	kicity - fish	LC₅₀, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute to invertebr	kicity - aquatic ates	LC₅₀, 24 hours: >10000 mg/l, Daphnia magna
Acute to plants	kicity - aquatic	Toxicity threshold, 7 days: 1800 mg/l, Scenedesmus quadricauda
12.2. Persistence and	degradability	
Persistence and degra	adability The deg	radability of the product is not known.
Ecological information	on ingredients.	
		2-Butoxyethanol
Biodegra	dation	Water - Degradation 90.4: 28 days
Diodegia		REACH dossier information.
		The substance is readily biodegradable.
		Propan-2-ol
Persister degradat		The product is readily biodegradable.
Biodegra	dation	Water - Degradation 53%: 5 days
12.3. Bioaccumulative	potential	
Bioaccumulative poter	ntial No data	available on bioaccumulation.
Partition coefficient	Not avai	lable.
Ecological information	on ingredients.	
2-Butoxyethanol		
Bioaccun	nulative potential	No data available on bioaccumulation.
Partition	coefficient	log Pow: 0.81 REACH dossier information.
12.4. Mobility in soil		
Mobility	The proc surfaces	duct contains volatile organic compounds (VOCs) which will evaporate easily from all s.
Ecological information	on ingredients.	

2-Butoxyethanol

Mobility	The product is miscible with water and may spread in water systems.
Surface tension	29.53 mN/m @ 20°C REACH dossier information.
	Propan-2-ol
Mobility	Mobile.
12.5. Results of PBT and vPv	/B assessment
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
Ecological information on ing	redients.
	2-Butoxyethanol
Results of PBT assessment	and vPvB This substance is not classified as PBT or vPvB according to current EU criteria.
	Propan-2-ol
Results of PBT assessment	and vPvB This substance is not classified as PBT or vPvB according to current EU criteria.
12.6. Other adverse effects	
Other adverse effects	None known.
SECTION 13: Disposal consi	derations
SECTION 13: Disposal consi 13.1. Waste treatment metho	
13.1. Waste treatment metho	ds Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners
13.1. Waste treatment metho General information	ds Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
13.1. Waste treatment metho General information Disposal methods	ds Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
13.1. Waste treatment metho General information Disposal methods SECTION 14: Transport infor	ds Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
13.1. Waste treatment metho General information Disposal methods SECTION 14: Transport infor 14.1. UN number	ds Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
13.1. Waste treatment metho General information Disposal methods SECTION 14: Transport infor 14.1. UN number UN No. (ADR/RID)	ds Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. mation

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(e	s)
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
ICAO packing group	None
ADN packing group	None

14.5. Environmental hazards

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	Health and Safety at Work etc. Act 1974 (as amended).
	The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment
	Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
	EH40/2005 Workplace exposure limits.
	The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18
December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of
Chemicals (REACH) (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16
December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

US - TSCA

The following ingredients are listed or exempt:

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). EC₅₀: 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Classification abbreviations and acronyms	Aerosol = Aerosol Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation
Classification procedures according to Regulation (EC) 1272/2008	Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: : Calculation method. Aerosol 1 - H222, H229: : Expert judgement.
Training advice	Read and follow manufacturer's recommendations.
Revision date	27/03/2018
Revision	1
Supersedes date	02/12/2015
SDS number	3990

Linnard statements in full	
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.
	H302 Harmful if swallowed.
	H312 Harmful in contact with skin.
	H315 Causes skin irritation.
	H319 Causes serious eye irritation.
	H332 Harmful if inhaled.
	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.