

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830 - Netherlands

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

1.1 Product identifier	
Product name	: ESL2HPQLOLKPF:ESL2 LIGHT BLACK 440:AD08
Product code	: ESL2HPQLOLKPF
Trade name	: STREAMLINE®
Date of issue/ Date of revision	: 24 October 2019
Version	: 5

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

Identified uses	
Colorant; Printing ink related material; Printing ink.	
Uses advised against	Reason
Not applicable.	

1.3 Details of the supplier of the safety data sheet

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Manufacturer/ Distributor	: SUN CHEMICAL NORTON HILL MIDSOMER NORTON BATH SOMERSET BA3 4RT UNITED KINGDOM (44) 1689 894000
e-mail address of person responsible for this SDS	SUN CHEMICAL O+R RECHTE TOCHT 2 1507 BZ ZAANDAM POSTBUS 227 1500 EE ZAANDAM HOLLAND (31) 75 6555453 : regulatory.affairs@sunchemical.com

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number	: Nationaal Vergiftigingen Informatie Centrum : 030 - 274 88 88 (Uitsluitend bestemd om artsen te informeren bij accidentele vergiftigingen)
<u>Supplier</u>	
Telephone number	: (31) 858880596 (Chemtrec - 24 hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Eye Dam. 1, H318

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



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Signal word	: Danger
Hazard statements	: 🖉 auses serious eye damage.
Precautionary statements	
Prevention	: Wear eye or face protection. Wash hands thoroughly after handling.
Response	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazardous ingredients	: <mark>y</mark> -butyrolactone
Supplemental label elements	: Not applicable.

2.3 Other hazards

Other hazards which do : None known. not result in classification

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture				
			Classification	
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
γ -butyrolactone	EC: 202-509-5 CAS: 96-48-0	5 < 10	Acute Tox. 4, H302 Eye Dam. 1, H318 STOT SE 3, H335	[1]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General	 In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with room temperature water for at least 15 minutes, keeping eyelids open. In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to medical doctor	: Treat symptomatically. Contact poison treatment specialist immediately if la	arge
	quantities have been ingested or inhaled.	
Specific treatments	: No specific treatment.	

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising f	om the substance or mixture
Hazards from the substance or mixture	: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective equipment for fire-fighters	: Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	xclude sources of ignition and ventilate the area. Avoid brea efer to protective measures listed in sections 7 and 8.	thing vapor or mist.
For emergency responders	specialized clothing is required to deal with the spillage, tak formation in Section 8 on suitable and unsuitable materials. formation in "For non-emergency personnel".	
6.2 Environmental precautions	o not allow to enter drains or watercourses. If the product covers, or sewers, inform the appropriate authorities in accordegulations.	
6.3 Methods and materials for containment and cleaning up	ontain and collect spillage with non-combustible, absorbent arth, vermiculite or diatomaceous earth and place in contain ccording to local regulations (see Section 13). Preferably cle void using solvents.	er for disposal
6.4 Reference to other sections	ee Section 1 for emergency contact information. ee Section 8 for information on appropriate personal protect ee Section 13 for additional waste treatment information.	ive equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling	 Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing
	and floors should be of the conducting type.

SECTION 7: Handling and storage

	Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.
7.2 Conditions for safe storage, including any incompatibilities	 Store between the following temperatures: 5 - 35 °C Store in accordance with local regulations. Notes on joint storage Keep away from: oxidizing agents, strong alkalis, strong acids. Additional information on storage conditions Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end use(s) Recommendations Industrial sector specific solutions	Not available. Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere 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. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be
	required.

DNELs/DMELs

Product/ ingredient name	Туре	Exposure	Value	Population	Effects
No DELs available.					

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
No PECs available.				

SECTION 8: Exposure controls/personal protection

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8.2 Exposure controls	
Appropriate engineering controls	: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.
Individual protection meas	ures
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
Eye/face protection	: Use safety eyewear designed to protect against splash of liquids.
Skin protection	
Hand protection	: Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
Gloves	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	 Personnel should wear antistatic clothing made of natural fibers or of high- temperature-resistant synthetic fibers.
Respiratory protection	 If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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Physical state	:	Liquid.
Color	:	Black.
Odor	:	Characteristic.
Odor threshold	:	Not applicable.
Melting point/freezing point	:	Not applicable.
Flash point	:	67°C
VOC	:	10%
рН	:	Not tested
Explosion limits	:	Lower: 0.3% Upper: 16%
Boiling point	:	✓owest known value: 205°C (400°F)
Evaporation rate	:	0.03 (Gamma-Butyrolactone) compared with butyl acetate
Vapor pressure	:	Not tested
Vapor density	:	Not tested
Relative density	:	Not tested
Solubility(ies)	:	Not tested
Partition coefficient: n-octanol/ water	:	Not applicable.

SECTION 9: Physical and chemical properties

Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not applicable.
Viscosity	: Not tested
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity					
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).				
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.				
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.				
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.				
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.				

SECTION 11: Toxicological information

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
γ -butyrolactone	LC50 Inhalation Vapor	Rat	>5100 mg/m³	4 hours
	LD50 Oral	Rat	1540 mg/kg	-

Irritation/Corrosion

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Date of issue : 24	October 2019
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Target organs

SECTION 11: Toxicological information

Sensitization

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Mutagenicity

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Carcinogenicity

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Reproductive toxicity

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Teratogenicity

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] **Specific target organ toxicity (single exposure)**

Product/ingredient name Category Route of

		exposure	
✓butyrolactone	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aspiration hazard

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

Mobility

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
v-butyrolactone	-0.566	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.

12.5 Results of PBT and vPvB assessment

: Not applicable.

: Not available.

vPvB : Not applicable.

SECTION 12: Ecological information

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

13.1 Waste treatment methods

<u>Product</u>	
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
European Waste Catalogue (EWC):	: 08 03 12 waste ink containing hazardous substances
Special precautions	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

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	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.3 Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	The product is only regulated as a dangerous good when transported in tank vessels.	-	-

SECTION 14: Transport information

14.6 SpecialTraprecautions forprecautions forsecuseracc

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk: Not available.according to Annex II ofMARPOL and the IBC Code

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorization

Substances of very high concern None of the components are listed. Annex XVII - Restrictions : Not applicable. on the manufacture. placing on the market and use of certain dangerous substances, mixtures and articles **Other EU regulations** National regulations Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work. Water Discharge Policy : A(4) Low hazard for aquatic organisms, may have long-term hazardous effects in aguatic environment. Decontamination effort: A (ABM) 15.2 Chemical Safety : No Chemical Safety Assessment has been carried out. Assessment

SECTION 16: Other information

CEPE code	: 1					
Indicates information that has changed from previously issued version.						
Abbreviations and	: ATE = Acute Toxicity Estimate					
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number					
Procedure used to de	vive the classification according to Population (EC) No. 1272/2008 [CL P/GHS]					

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
E ye Dam. 1, H318	Calculation method

Date of issue	: 24 October 2019
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SECTION 16: Other information

Full text of abbreviated H statements	 H302 Harmful if swallowed. H318 Causes serious eye damage. H335 May cause respiratory irritation. 	
Full text of classifications [CLP/GHS]	: K⊂ute Tox. 4, H302 Eye Dam. 1, H318 STOT SE 3, H335	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Date of printing	: 18 November 2019	
Date of previous issue	: 18 June 2019	
Notice to reader		

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Annex