

## SAFETY DATA SHEET Linx Solvent 3710

# 1.1. Product identifier Product name Linx Solvent 3710 Product number 3710 1.2. Relevant identified uses of the substance or mixture and uses advised against Identified uses Printing ink. Cleaning agent. 1.3. Details of the supplier of the safety data sheet Supplier Linx Printing Technologies Ltd Linx House

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

Linx House 8 Stocks Bridge Way Compass Point Business Park ST IVES Cambridgeshire PE27 5JL UK T: +44 (0)1480 302100 Mon-Fri 9am-5pm F: +44 (0)1480 302116 E-mail: SDS@Linx.co.uk Web: www.linxglobal.com

## 1.4. Emergency telephone number

Emergency telephone 24HR: (+1)-352-323-3500; USA 1-800-535-5053

## SECTION 2: Hazards identification

2.1. Classification of the substance or mixture			
Classification (EC 1272/2008)			
Physical hazards	– Flam. Liq. 2 - H225		
Health hazards	Eye Irrit. 2 - H319 STOT SE 3 - H335, H336		
Environmental hazards	Not Classified		
2.2. Label elements			
Hazard pictograms			
Signal word	Danger		
Hazard statements	H225 Highly flammable liquid and vapour.		
	H319 Causes serious eye irritation.		
	H335 May cause respiratory irritation.		
	H336 May cause drowsiness or dizziness.		

Precautionary statements	<ul> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P313 Get medical advice/ attention.</li> <li>P501 Dispose of contents/ container in accordance with national regulations.</li> </ul>
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	acetone, DIETHYL KETONE
Supplementary precautionary statements	<ul> <li>P240 Ground and bond container and receiving equipment.</li> <li>P241 Use explosion-proof electrical equipment.</li> <li>P242 Use non-sparking tools.</li> <li>P243 Take action to prevent static discharges.</li> <li>P261 Avoid breathing vapour/ spray.</li> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.</li> <li>Rinse skin with water or shower.</li> <li>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P312 Call a POISON CENTRE/doctor if you feel unwell.</li> <li>P337+P313 If eye irritation persists: Get medical advice/ attention.</li> <li>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</li> <li>P403+P235 Store in a well-ventilated place. Keep cool.</li> <li>P405 Store locked up.</li> </ul>

## 2.3. Other hazards

None known.

Г

3.2. Mixtures		
ACETONE		60-809
CAS number: 67-64-1	EC number: 200-662-2	REACH registration number: 01- 2119471330-49-XXXX
Classification		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H336		
DIETHYL KETONE		20-409
CAS number: 96-22-0	EC number: 202-490-3	REACH registration number: 01- 2119531111-60-XXXX
Classification		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H335, H336		

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

## SECTION 4: First aid measures

SECTION 4: First aid measure	₩S	
4.1. Description of first aid me	asures	
General information	Get medical attention if any discomfort continues. Never give anything by mouth to an unconscious person.	
Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.	
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately.	
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.	
Eye contact	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. See Section 11 for additional information on health hazards.	
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Irritation of nose, throat and airway.	
Ingestion	May cause stomach pain or vomiting.	
Skin contact	Prolonged contact may cause redness, irritation and dry skin.	
Eye contact	May cause temporary eye irritation.	
4.3. Indication of any immedia	te medical attention and special treatment needed	
Notes for the doctor	If in doubt, get medical attention promptly. Treat symptomatically.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	Extinguish with the following media: Alcohol-resistant foam. Carbon dioxide (CO2). Water spray, fog or mist. Powder.	
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	The product is highly flammable. Vapours may form 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.	
Hazardous combustion products	Oxides of carbon. Oxides of nitrogen.	
5.3. Advice for firefighters		
Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses. Containers close to fire should be removed or cooled with water.	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.	

#### SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedure

 Personal precautions
 Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate.

#### 6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Use appropriate
	containment to avoid environmental contamination.

#### 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. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely.

#### 6.4. Reference to other sections

-----

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Usage precautions	Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Vapours may accumulate on the floor and in low-lying areas. Contaminated rags and cloths must be put in fireproof containers for disposal.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage precautions	Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place.	
Storage class	Flammable liquid storage.	
7.3. Specific end use(s)		
Specific end use(s)	<b>pecific end use(s)</b> 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

## ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m<sup>3</sup>

## DIETHYL KETONE

Long-term exposure limit (8-hour TWA): WEL 200 ppm 716 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 250 ppm 895 mg/m<sup>3</sup> WEL = Workplace Exposure Limit

## ACETONE (CAS: 67-64-1)

DNEL	Workers - Dermal; Long term : 186 mg/kg/day Workers - Inhalation; Short term : 2420 mg/m³ Workers - Inhalation; Long term : 1210 mg/m³	
PNEC	Fresh water; 10.6 mg/l marine water; 1.06 mg/l Sediment (Freshwater); 30.4 mg/kg Sediment (Marinewater); 3.04 mg/kg Soil; 33.3 mg/kg Intermittent release; 21 mg/l STP; 100 mg/l	
	DIETHYL KETONE (CAS: 96-22-0)	
DNEL	Workers - Dermal; Long term systemic effects: 101 mg/kg Workers - Inhalation; Short term local effects: 1057 mg/m <sup>3</sup> Workers - Inhalation; Long term systemic effects: 708 mg/m <sup>3</sup> Workers - Inhalation; Long term local effects: 705 mg/m <sup>3</sup>	
8.2. Exposure controls		
Protective equipment		
Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.	
Eye/face protection	Wear chemical splash goggles.	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. For exposure up to 4 hours, wear gloves made of the following material: Butyl rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. 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.	
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.	
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.	
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Gas filter, type AX.	
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.	
SECTION 9: Physical and che	emical properties	
9.1. Information on basic phys	sical and chemical properties	
Appearance	Liquid.	

Odour	Characteristic.	
Odour threshold	Not available.	
рН	Not available.	
Melting point	-95°C	
Initial boiling point and range	56 - 100°C @ 760 mm Hg	
Flash point	-18°C Closed cup.	
Evaporation rate	> BuAc (BuAc=1)	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.6 (%v/v) Upper flammable/explosive limit: 13 (%v/v)	
Vapour pressure	185 mmHg @ 20°C	
Vapour density	2.96	
Relative density	0.75 - 0.85 @ 25°C	
Solubility(ies)	Slightly soluble in water.	
Partition coefficient	log Kow: 0.85. Information given is applicable to the major ingredient.	
Auto-ignition temperature	445°C	
Decomposition Temperature	Not available.	
Viscosity	0.3 - 1.0 mPa s @ 25°C	
Explosive properties	Not considered to be explosive.	
Oxidising properties	Does not meet the criteria for classification as oxidising.	
9.2. Other information		
Volatility	Volatile.	
SECTION 10: Stability and rea	activity	
10.1. Reactivity		
Reactivity	There are no known reactivity hazards associated with this product.	
10.2. Chemical stability		
Stability	Stable at normal ambient temperatures.	
10.3. Possibility of hazardous	reactions	
Possibility of hazardous reactions	Will not polymerise.	
10.4. Conditions to avoid		
Conditions to avoid	Avoid heat, flames and other sources of ignition.	
10.5. Incompatible materials		
Materials to avoid	Strong acids. Strong alkalis. Strong oxidising agents. Strong reducing agents.	
10.6. Hazardous decomposition	on products	
Hazardous decomposition products	Does not decompose when used and stored as recommended.	

## SECTION 11: Toxicological information

ozonon ni rokoologica in		
11.1. Information on toxicological effects		
<u>Acute toxicity - oral</u> Notes (oral LD∞)	Based on available data the classification criteria are not met.	
Acute toxicity - dermal Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.	
Acute toxicity - inhalation Notes (inhalation $LC_{50}$ )	Based on available data the classification criteria are not met.	
Skin corrosion/irritation Skin corrosion/irritation	Repeated exposure may cause skin dryness or cracking.	
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.	
Carcinogenicity		
	Based on available data the classification criteria are not met.	
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	STOT SE 3 - H335, H336	
Specific target organ toxicity -	repeated exposure	
STOT - repeated exposure	Based on available data the classification criteria are not met.	
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	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting. Drowsiness, dizziness, disorientation, vertigo.	
Ingestion	Liquid irritates mucous membranes and may cause abdominal pain if swallowed. Nausea, vomiting. Diarrhoea.	
Skin contact	Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking.	
Eye contact	Irritating to eyes. Vapour or spray may cause temporary (reversible) eye damage.	

Revision date: 21/09/2019

## Linx Solvent 3710

Route of exposure Inhalation Skin and/or eye contact Ingestion

#### Toxicological information on ingredients.

		ACETONE
	Acute toxicity - oral	
	Acute toxicity oral (LD₅₀ mg/kg)	5,800.0
	Species	Rat
	ATE oral (mg/kg)	5,800.0
	Acute toxicity - dermal	
	Notes (dermal LD <sub>50</sub> )	LD₅₀ >7400 mg/kg, Dermal, Rabbit
	Acute toxicity - inhalation	
	Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)	76.0
	Species	Rat
	ATE inhalation (vapours mg/l)	76.0
		DIETHYL KETONE
	Acute toxicity - oral	
	Acute toxicity oral (LD₅₀ mg/kg)	2,900.0
	Species	Rat
	ATE oral (mg/kg)	2,900.0
	Acute toxicity - dermal	
	Acute toxicity dermal (LD₅₀ mg/kg)	16,200.0
	Species	Rabbit
	ATE dermal (mg/kg)	16,200.0
	Acute toxicity - inhalation	
	Notes (inhalation LC <sub>50</sub> )	LC₅₀ >20 mg/l, 4 hours, Vapour Rat
SECTION 12	2: Ecological information	
Ecotoxicity	The proc	luct is not expected to be hazardous to the environment.
12.1. Toxicit	<u>y</u>	
Toxicity	See the	other subsections of this section for further details.

Ecological information on ingredients.

## ACETONE

Acute aquatic toxicity

Acute toxicity - fish

LC50, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout)

	e toxicity - aqu tebrates	atic	EC₅₀, 48 hours: 8800 mg/l, Daphnia magna
Acute plant	e toxicity - aqu s	atic	NOEC, 8 days: 530 mg/l, Freshwater algae
			DIETHYL KETONE
Acute	e aquatic toxic	ity	
Acute	e toxicity - fish		LC₅₀, 96 hours: 1540 mg/l, Pimephales promelas (Fat-head Minnow)
	e toxicity - aqu tebrates	atic	EC₅₀, 48 hours: >500 mg/l, Daphnia magna
Acute plant	e toxicity - aqu s	atic	EC₅₀, 72 hours: >500 mg/l, Scenedesmus subspicatus
12.2. Persistence	and degradabi	ility	
Persistence and de	egradability N	No data a	available.
12.3. Bioaccumula	ative potential		
Bioaccumulative p	otential N	No data a	available on bioaccumulation.
Partition coefficien	it l	og Kow:	0.85. Information given is applicable to the major ingredient.
12.4. Mobility in so	bil		
Mobility	٦	The produ	uct contains organic solvents which will evaporate easily from all surfaces.
12.5. Results of Pl	BT and vPvB a	assessme	ent
Results of PBT an assessment	d vPvB	This prod	luct does not contain any substances classified as PBT or vPvB.
12.6. Other advers	se effects		
Other adverse effe	ects N	None kno	own.
SECTION 13: Disp	oosal consider	ations	
13.1. Waste treatn	nent methods		
General informatic	c f	considere ílammable	ndling waste, the safety precautions applying to handling of the product should be ed. Materials such as cleaning rags and paper wipes that are contaminated with e liquids may self-ignite after use and should be stored in designated fireproof s with tight-fitting, self-closing lids.
Disposal methods		-	of waste to licensed waste disposal site in accordance with the requirements of the ste Disposal Authority. Dispose of waste via a licensed waste disposal contractor.
Waste class	E	Europear	n Waste Catalogue Number (2000/532/EC): 08 03 12
SECTION 14: Trai	nsport informa	tion	
14.1. UN number			
UN No. (ADR/RID)	) 1	1210	
UN No. (IMDG)	1	1210	
UN No. (ICAO)	1	1210	
14.2. UN proper sl	hipping name		

Proper shipping name (ADR/RID)	PRINTING INK RELATED MATERIAL
Proper shipping name (IMDG)	PRINTING INK RELATED MATERIAL
Proper shipping name (ICAO)	PRINTING INK RELATED MATERIAL
Proper shipping name (ADN)	PRINTING INK RELATED MATERIAL

## 14.3. Transport hazard class(es)

ADR/RID class	3 - F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3

## Transport labels



#### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

## 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

## 14.6. Special precautions for user

EmS	F-E, S-D

Emergency Action Code 3YE

## 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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
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).
Guidance	Workplace Exposure Limits EH40.
	Introduction to Local Exhaust Ventilation HS(G)37.

Authorisations (Annex XIV Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Annex XVII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### **SECTION 16: Other information**

Abbreviations and acronyms used in the safety data sheet	•
Revision date	21/09/2019
Revision	12
Supersedes date	26/04/2015
SDS number	10156
Hazard statements in full	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H335 May cause respiratory 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.