SAFETY DATA SHEET
Linx Solvent for wet process ink 1555

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Linx Solvent for wet process ink 1555
Product No. 1555

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
Burrel Road
ST IVES
Cambridgeshire PE27 3LA
UK
T: +44 (0)1480 302100 Available 9am-5pm Mon-Fri
F: +44 (0)1480 302116
MSDS@Linx.co.uk
www.linxglobal.com

1.4. Emergency telephone number

24 HOUR SERVICE: (+1)-352-323-3500 (USA: 1-800-535-5053)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36. F;R11. R66, R67.

2.2. Label elements

Labelling


Irritant


Highly flammable

Risk Phrases

R11	Highly flammable
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Safety Phrases

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.
S51	Use only in well-ventilated areas.

S60 This material and its container must be disposed of as hazardous waste.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

BUTANONE		**60-100%**
CAS-No.: 78-93-3	**EC No.: 201-159-0**	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R66 R67	

ETHANOL		**10-30%**
CAS-No.: 64-17-5	**EC No.: 200-578-6**	
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues. Do not give victim anything to drink if they are unconscious.

Inhalation

Move the exposed person to fresh air at once. If breathing stops, provide artificial respiration. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Provide rest, warmth and fresh air. Get medical attention immediately!

Skin contact

Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. 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 dependant of the concentration and the length of exposure.

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 immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Alcohol resistant foam. Carbon dioxide (CO_2). Water spray, fog or mist. Powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire, toxic gases (CO, CO_2, NO_x) may be formed.

Unusual Fire & Explosion Hazards

HIGHLY FLAMMABLE! Vapours may form explosive mixture with air at room temperature. Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control. Containers close to fire should be removed or cooled with water.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Do not breathe vapour. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Provide ventilation and confine spill. Do not allow runoff to sewer. Clean-up personnel should use respiratory and/or liquid contact protection. Absorb spillage with suitable absorbent material. Transfer to a container for disposal.

6.4. 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

Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Risk of vapour concentration 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

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. May attack some plastics, rubber and coatings.

Storage Class

Flammable liquid storage.

7.3. 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

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
BUTANONE	WEL	200 ppm	600 mg/m3	300 ppm	899 mg/m3	Sk
ETHANOL	WEL	1000 ppm	1920 mg/m3			

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment

Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use respiratory equipment with gas filter, type AX.

Hand protection

Protective gloves must be used if there is a risk of direct contact or splash. For exposure of 1 to 4 hours use gloves made of: Butyl rubber. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Characteristic. of solvents
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	80 °C @ 760 mm Hg
Melting point (°C)	-86
Relative density	0.75 - 0.85 @ 20°C
Vapour density (air=1)	2.4
Vapour pressure	78 mmHg @ 20°C
Evaporation rate	> BuAc (BuAc=1)
Viscosity	0.3 - 1.0 mPas @ 20°C
Flash point	-6 CC (Closed cup).
Auto Ignition Temperature (°C)	515
Flammability Limit - Lower(%)	1.8 (%v/v)
Flammability Limit - Upper(%)	11.5 (%v/v)

9.2. Other information

Volatility Description Volatile

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidising substances. Strong reducing agents.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and 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.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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

12.1. Toxicity

12.2. Persistence and degradability

Degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product contains organic solvents which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

Waste Class

European Waste Catalogue Number (2000/532/EC): 08 03 12

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1210
UN No. (IMDG)	1210
UN No. (ICAO)	1210

14.2. UN proper shipping name

Proper Shipping Name	PRINTING INK RELATED MATERIAL

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3 - F1
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3

Transport Labels

14.4. Packing group

ADR/RID/ADN 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 MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Chemicals (Hazard Information & Packaging) Regulations.

Guidance Notes

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37.

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	12/07/2012
Revision	11
Supersedes date	09/05/2009
SDS No.	10063

Risk Phrases In Full

R11	Highly flammable
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.