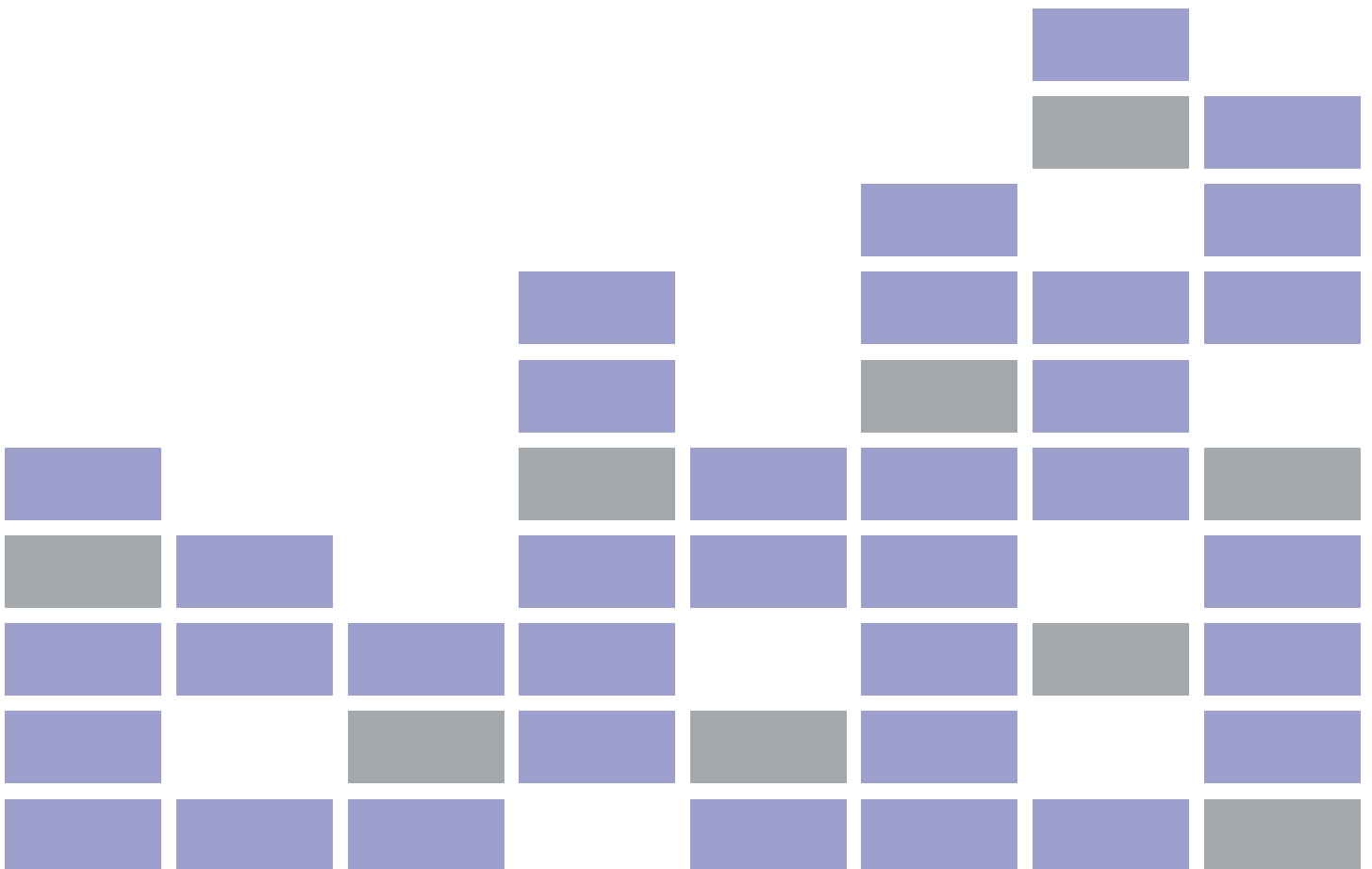




WATER-BASED INKS
& DISPERSIONS
PRODUCT
CATALOGUE





Water-Based Pigment Dispersions

Product List



Description:

This diverse pigment base range has been expertly formulated with thorough testing using the highest quality raw materials.

These pigment dispersions are prepared for application in practically any water-based ink formulations with current use on the following substrates: corrugated board, white board, coated board, labels, serviettes, kitchen towel and toilet rolls.



Product List:

	Product	Pigment Loading	UPP Code	Cost per kg
1	AquaBase Blue 15.3	40	BAS001	R 80.00
2	AquaBase Green 7	38	BAS002	R 82.00
3	AquaBase Black P35	40	BAS003	R 62.00
4	AquaBase Black N339	35	BAS004	R 25.00
5	AquaBase Magenta (Red 57.1)	38	BAS005	R 62.00
6	AquaBase Red 2	38	BAS006	R 89.00
7	AquaBase Violet 27	34	BAS007	R 98.00
8	AquaBase Fanal Pink	34	BAS008	R 265.00
9	AquaBase White	32	BAS009	R 30.00
10	AquaBase Red 53.1	40	BAS010	R 66.00
11	AquaBase Violet 3	38	BAS011	R 310.00
12	AquaBase White (high pigment loading)	45	BAS012	R 40.00
13	AquaBase Yellow 14	40	BAS014	R 75.00
14	AquaBase Blue 15.1	40	BAS016	R 118.00
15	AquaBase Orange 13	41	BAS018	R 83.00
16	AquaBase Red 49.1	40	INK016	R 72.00



Products Physiochemical Properties - Range:

pH	8.5 - 9.0
Viscosity [Din 4 Cup]	22 - 60 secs
Viscosity [Sheen Krebs Viscometer 480]	250 - 600 centipoise
Chemical Stability	excellent



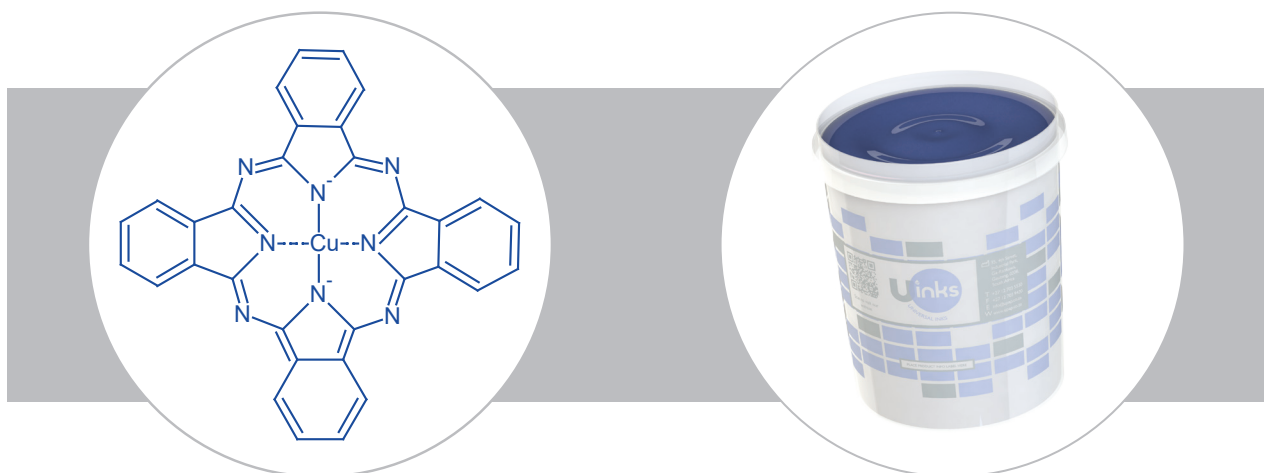
Description:

An aqueous dispersion of Pigment Phthalocyanine Blue 15.3



Dispersion Specifications:

Component	%
Phthalocyanine blue 15.3 pigment	40.0
High-performance dispersion resin	33.5
Water	14.0
Additives	12.5
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent

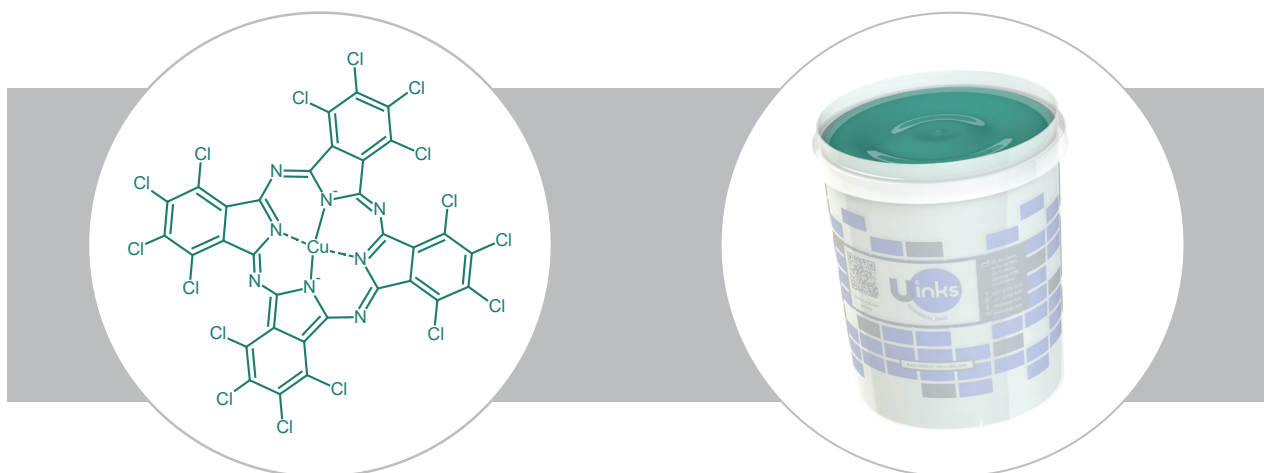


Description:
 An aqueous dispersion of Pigment Phthalocyanine 7



Dispersion Specifications:

Component	%
Phthalocyanine green 7 pigment	38.0
High-performance dispersion resin	34.0
Water	16.0
Additives	12.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	250 - 600 centipoise
Chemical Stability	excellent

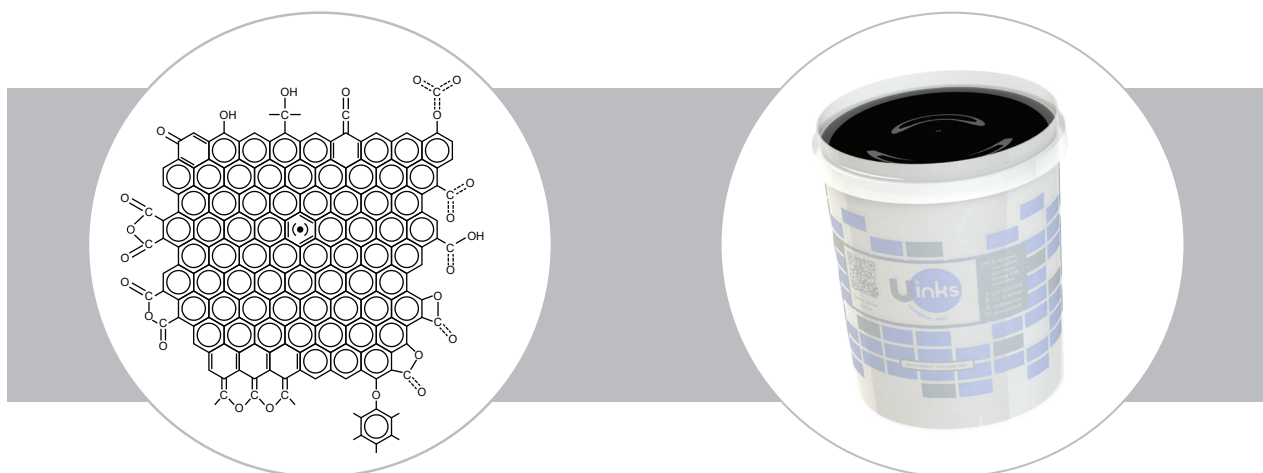


Description:
 An aqueous dispersion of Pigment Printex Black 35



Dispersion Specifications:

Component	%
Printex black P35 pigment	40.0
High-performance dispersion resin	29.0
Water	18.0
Additives	13.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.26 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	250 - 300 centipoise
Chemical Stability	excellent

Pigment Reference: Yahya, M.A, Al-Qodah, Z., Ngah, C.W.Z., Renewable and Sustainable Energy Reviews, 2015 (46), 218-235

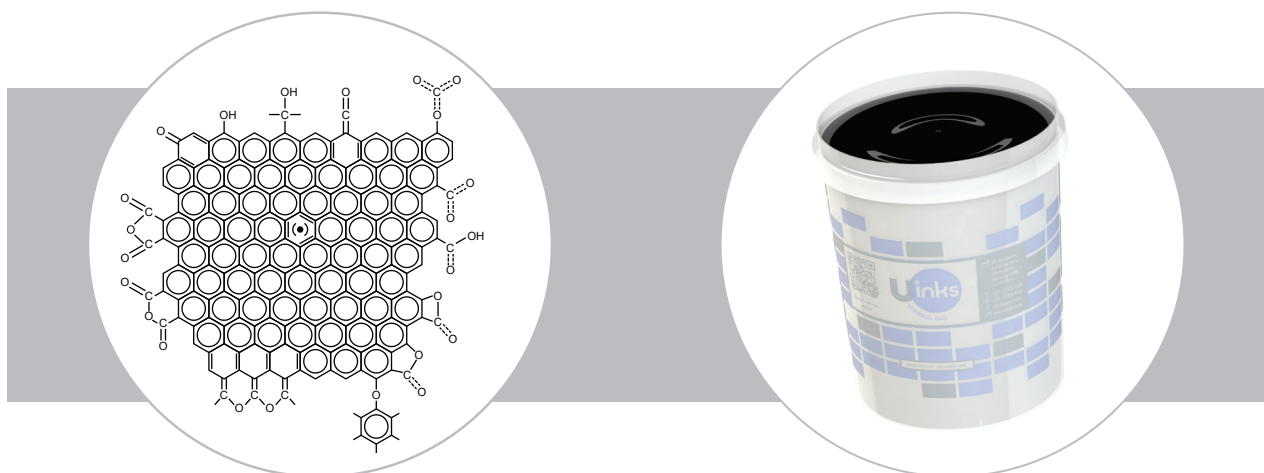


Description:
 An aqueous dispersion of Pigment Carbon Black N339



Dispersion Specifications:

Component	%
Printex black P35 pigment	35.0
High-performance dispersion resin	22.0
Water	30.0
Additives	13.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.26 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	500 - 600 centipoise
Chemical Stability	excellent

Pigment Reference: Yahya, M.A, Al-Qodah, Z., Ngah, C.W.Z., Renewable and Sustainable Energy Reviews, 2015 (46), 218-235



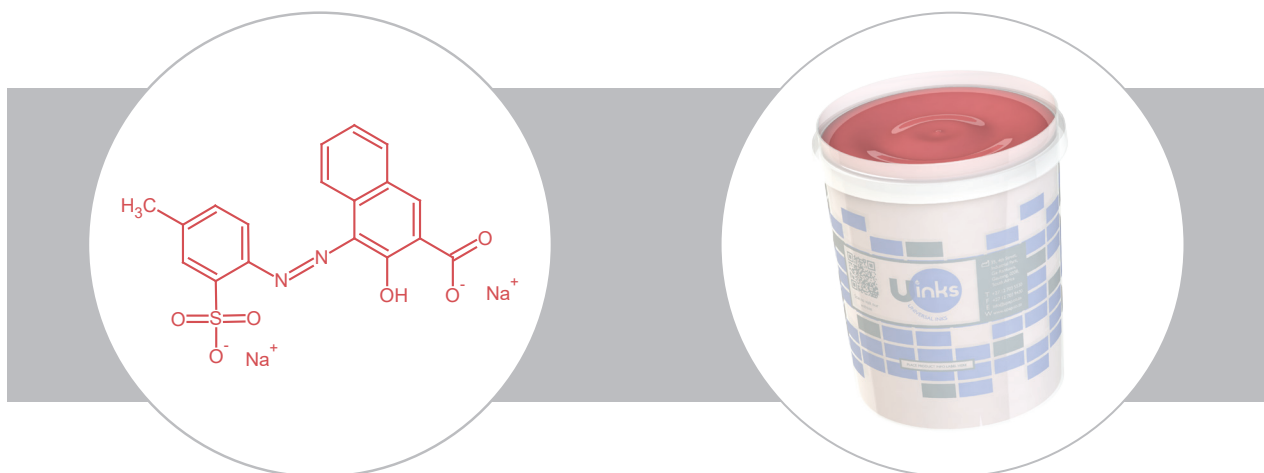
Description:

An aqueous dispersion of Pigment Azo Red 57.1 (Lithol Rubine BK)



Dispersion Specifications:

Component	%
Azo red 57.1 pigment	38.0
High-performance dispersion resin	33.0
Water	16.0
Additives	13.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.25 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



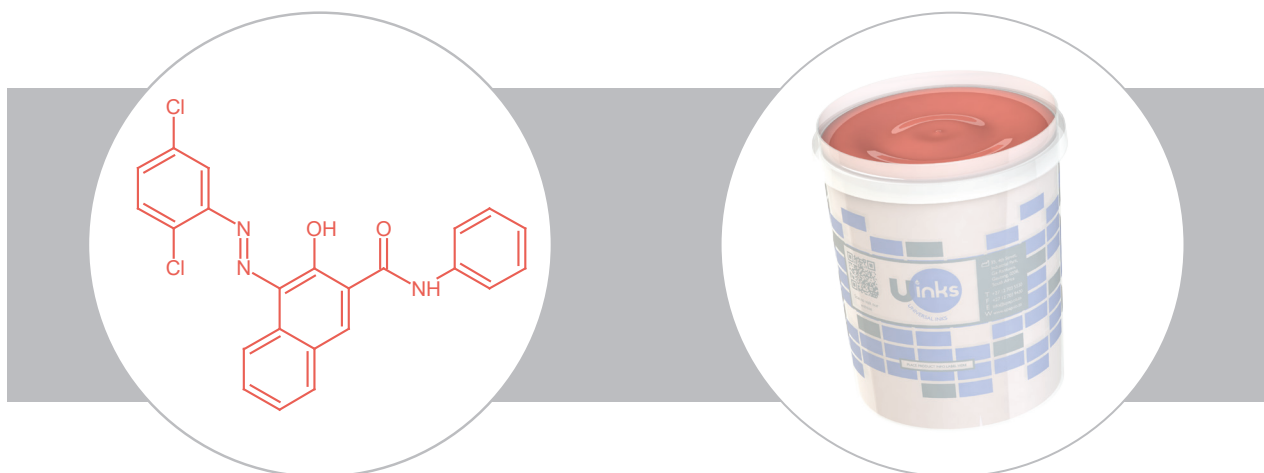
Description:

An aqueous dispersion of Pigment Red 2



Dispersion Specifications:

Component	%
Red 2 pigment	38.0
High-performance dispersion resin	36.0
Water	18.0
Additives	8.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



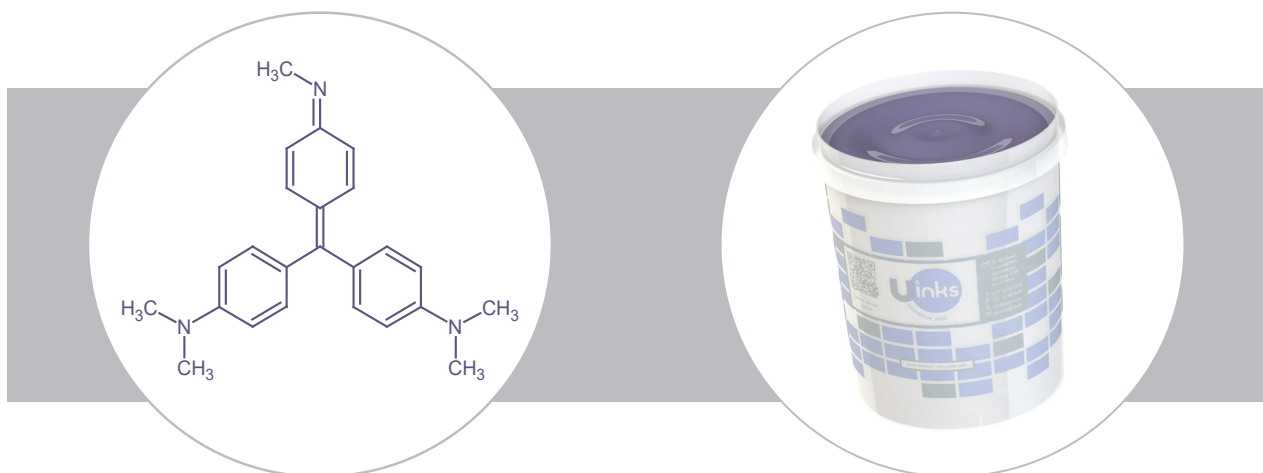
Description:

An aqueous dispersion of Pigment Violet 27



Dispersion Specifications:

Component	%
Violet 27 pigment	34.0
High-performance dispersion resin	32.0
Water	21.0
Additives	13.0
TOTAL	100.0



Copper Ferrocyanide Counterion



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



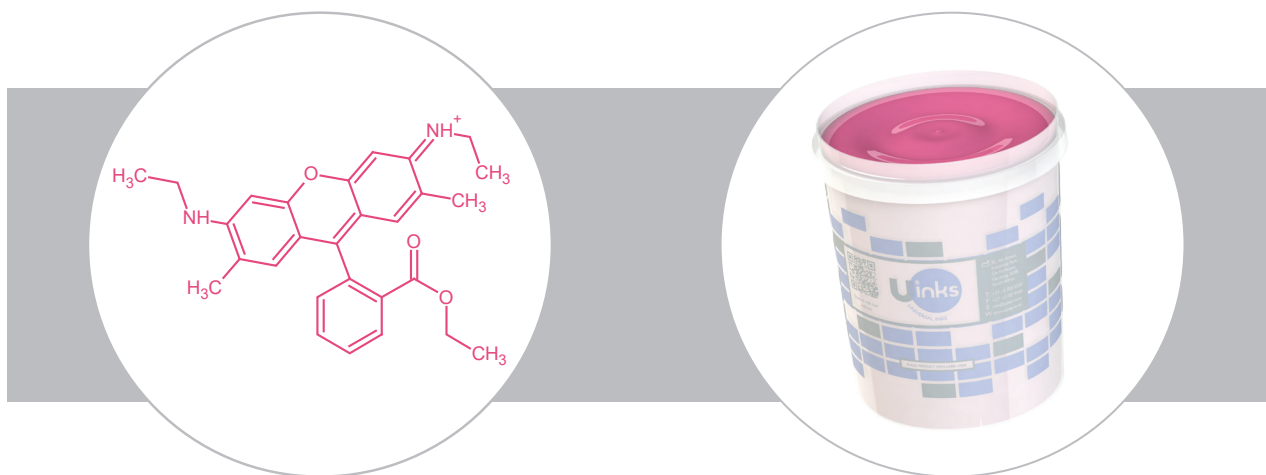
Description:

An aqueous dispersion of Pigment Red 169



Dispersion Specifications:

Component	%
Red 169 pigment	34.0
High-performance dispersion resin	32.0
Water	21.0
Additives	13.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



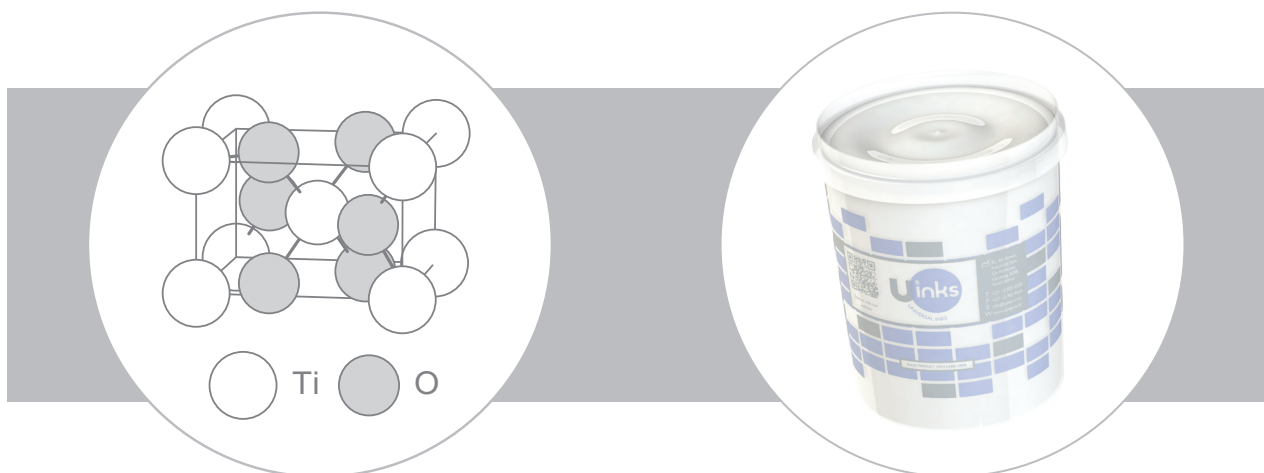
Description:

An aqueous dispersion of Pigment titanium dioxide designed for application in corrugated, white and coated board inks.



Dispersion Specifications:

Component	%
Rutile titanium dioxide pigment	32.0
High-performance dispersion resin	30.0
Water	23.0
Additives	15.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	350 - 400 centipoise
Chemical Stability	excellent



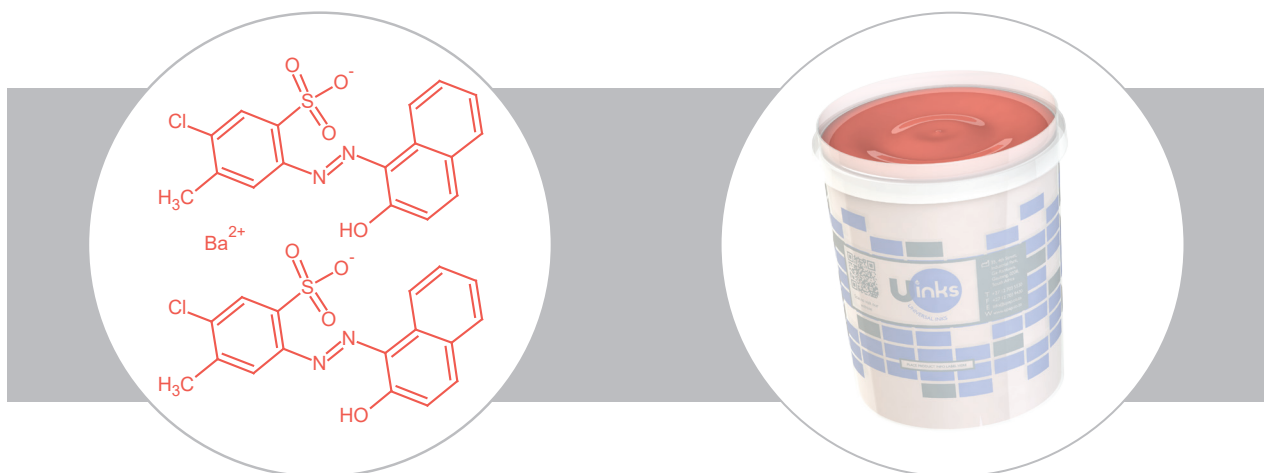
Description:

An aqueous dispersion of Pigment Red 53.1



Dispersion Specifications:

Component	%
Red 53.1 pigment	40.0
High-performance dispersion resin	32.0
Water	15.0
Additives	13.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



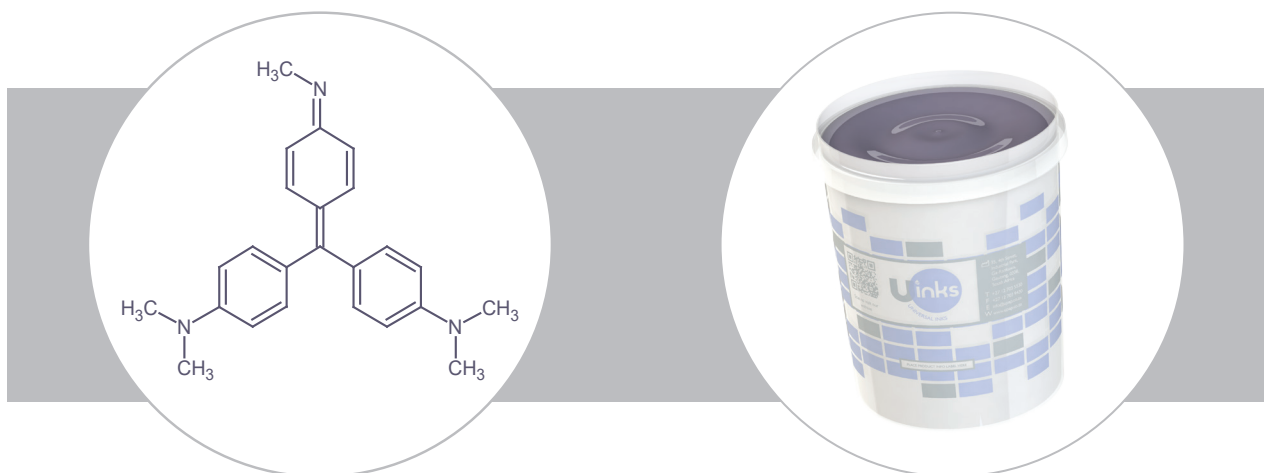
Description:

An aqueous dispersion of Pigment Violet 3



Dispersion Specifications:

Component	%
Violet 3 pigment	38.0
High-performance dispersion resin	32.0
Water	17.0
Additives	13.0
TOTAL	100.0



Phospho Molybdic Counterion



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



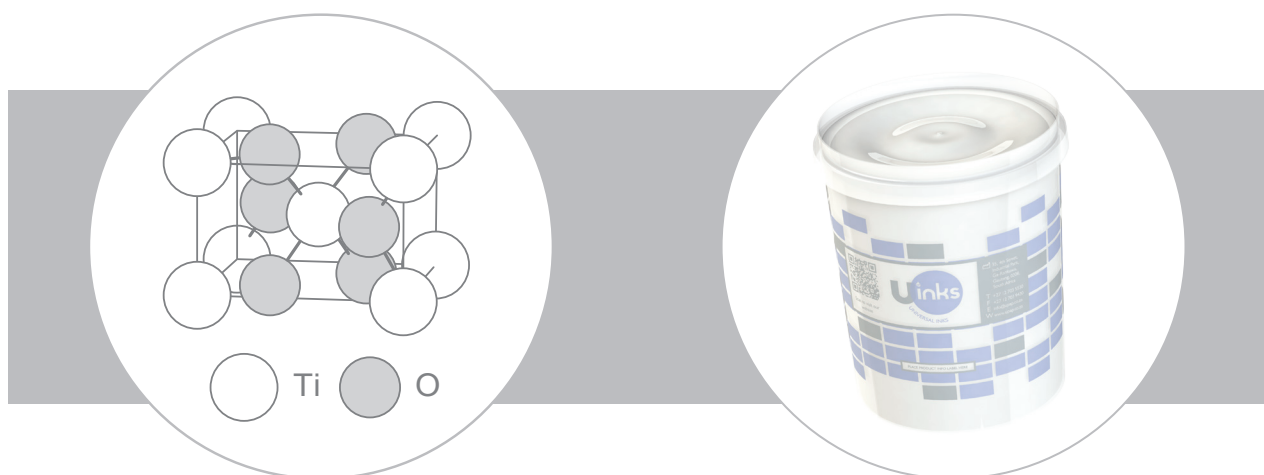
Description:

An aqueous dispersion of Pigment titanium dioxide designed for application in paper ink formulations.



Dispersion Specifications:

Component	%
Rutile titanium dioxide pigment	45.0
High-performance dispersion resin	36.0
Water	10.0
Additives	9.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.33 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	250 - 300 centipoise
Chemical Stability	excellent



Description:
 An aqueous dispersion of Pigment Diarylide Yellow 14



Dispersion Specifications:

Component	%
Diarylide yellow 14 pigment	40.0
High-performance dispersion resin	29.0
Water	17.0
Additives	14.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.20 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



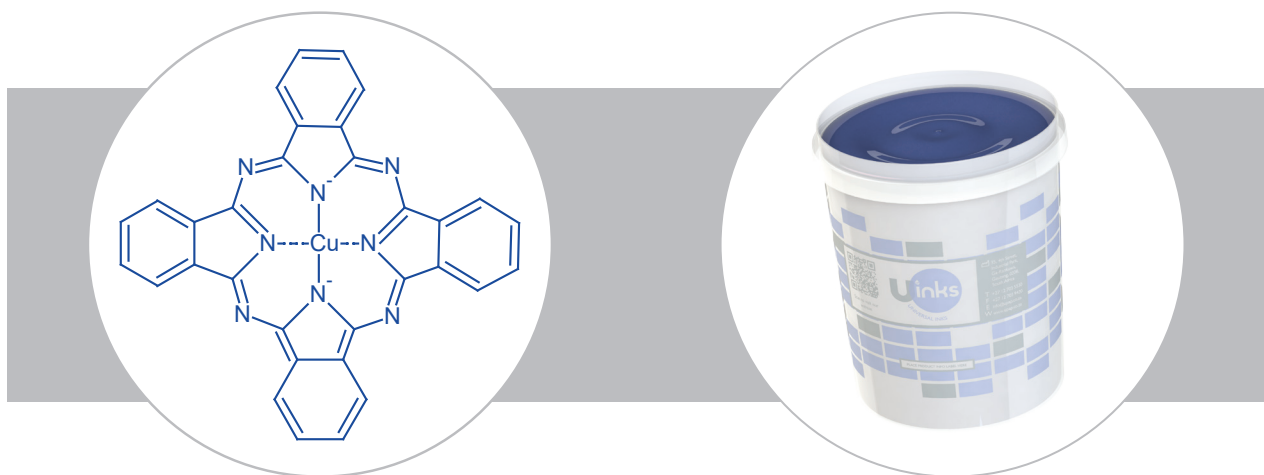
Description:

An aqueous dispersion of Pigment Phthalocyanine Blue 15.1



Dispersion Specifications:

Component	%
Phthalocyanine blue 15.1 pigment	40.0
High-performance dispersion resin	33.5
Water	14.0
Additives	12.5
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent

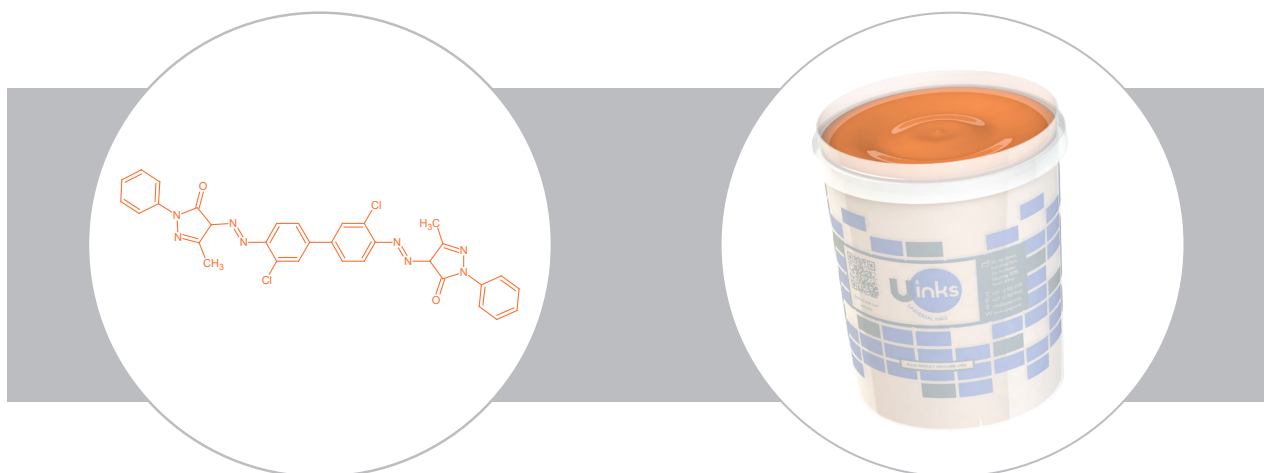


Description:
 An aqueous dispersion of Pigment Orange 13



Dispersion Specifications:

Component	%
Orange 13 pigment	41.0
High-performance dispersion resin	32.0
Water	13.0
Additives	14.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



Description:

An aqueous dispersion of Pigment Red 49.1



Dispersion Specifications:

Component	%
Red 49.1 pigment	40.0
High-performance dispersion resin	32.0
Water	15.0
Additives	13.0
TOTAL	100.0



Physiochemical Properties:

pH	8.0 - 8.5
Density	1.28 kg/l
Fineness of grind	< 2.0 micron
Viscosity [Sheen Krebs Viscometer 480 (200 RPM, ~26°C)]	450 - 600 centipoise
Chemical Stability	excellent



Water-Based Corrugated & White Board Inks

Product Overview




Description:

These corrugated (Kraft) and white board inks are prepared from the best quality components and we can manufacture practically any colour required. We specialise in spot colours and can blend any colour with the minimum order size of 20 kg. Customer colour requirements can be communicated via a pantone code or a printed sample. The exact ink printing performance specifications will also be tailored and prepared such as the viscosity, pH, drying speed, gloss and required resistance properties.

These water based inks are composed of the most environmentally friendly materials available and are an excellent combination of world class performance inks and enhanced safety.



Product List Range:

	Product	Pigment Loading %	Cost per kg
	Process & Spot Colours	5 - 50	R 25.00 - R300.00

Please contact us to determine your exact ink requirements and we will offer the best pricing accordingly.



Products' Physiochemical Properties Range:

pH	8.5 - 9.5
Viscosity [Din 4 Cup]	13 - 60 secs
Scuff Resistance	excellent
Chemical Stability	excellent





Water-Based Label Inks

Product List



Description:

This high performance ink range has been carefully formulated with rigorous testing and precision using the best quality raw materials.

These products are designed for printing on label and narrow web machines on the corresponding substrates with all of the runability and print characteristics of solvent-based inks with the safety and environmental benefits of a water-based product.



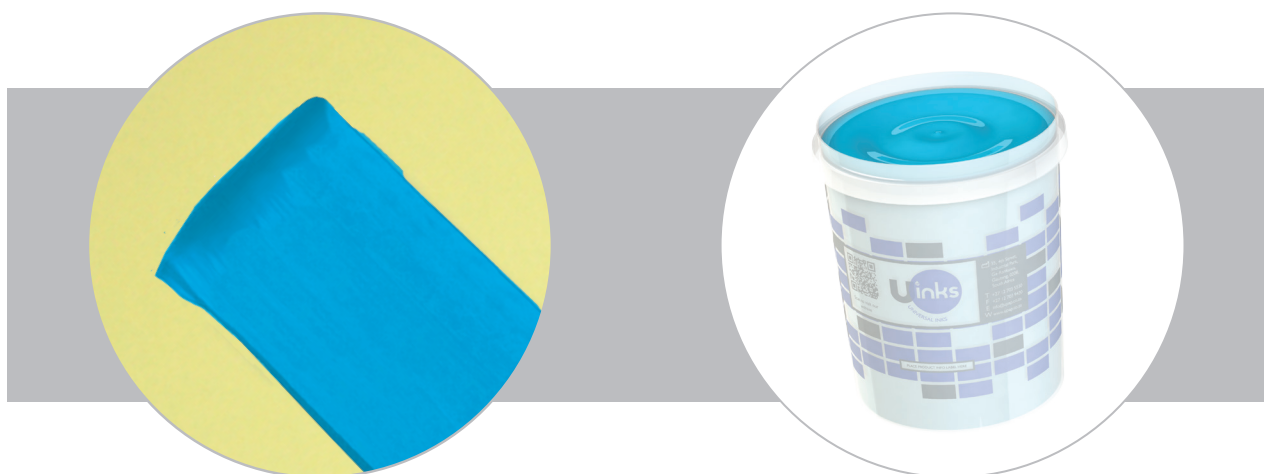
Product List:

	Product	UPP Code	Cost per kg
1	Process Cyan	HLB100	R 85.00
2	Process Magenta	HLR101	R 65.00
3	Process Yellow	HLY103	R 85.00
4	Process Black	HLK102	R 80.00
5	White Label Ink	HLW105	R 65.00



Products Physiochemical Properties:

pH	8.5 - 9.0
Viscosity [Din 4 Cup]	18 - 22 secs
Viscosity [Sheen Krebs Viscometer 480]	250 - 300 centipoise
Chemical Stability	excellent





Water-Based Tissue Inks

Product Overview




Description:

These tissue inks are prepared from the best quality components and we can manufacture practically any colour required. We specialise in spot colours and can blend any colour with the minimum order size of 20 kg. Customer colour requirements can be communicated via a pantone code or a printed sample. The exact ink printing performance specifications will also be tailored and prepared such as the viscosity, pH, drying speed, gloss and required resistance properties.

These water based inks are composed of the most environmentally friendly materials available and are an excellent combination of world class performance inks and enhanced safety.



Product List Range:

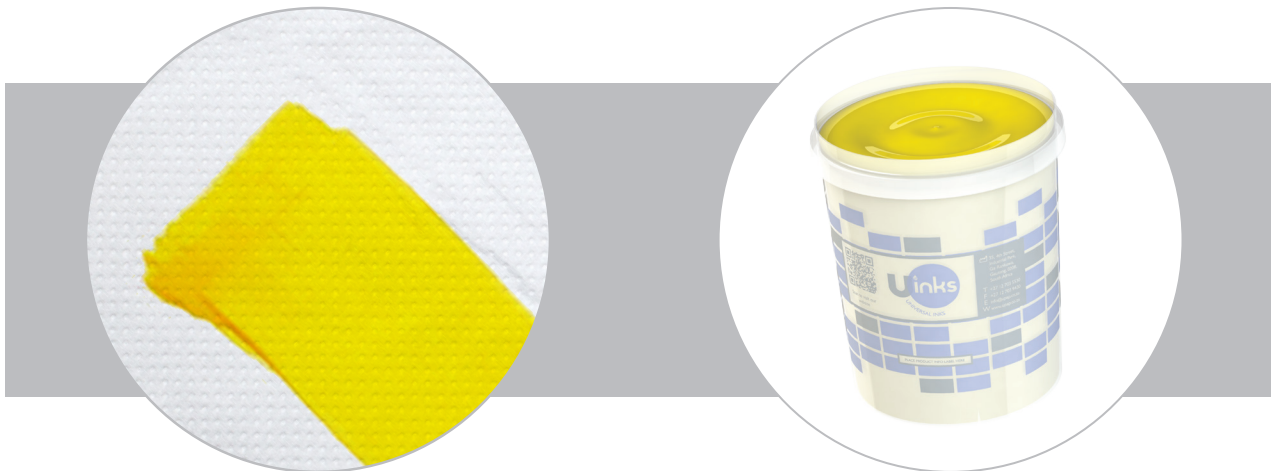
	Product	Pigment Loading %	Cost per kg
	Process & Spot Colours	5 - 50	R 25.00 - R300.00

Please contact us to determine your exact ink requirements and we will offer the best pricing accordingly.



Products' Physiochemical Properties Range:

pH	8.5 - 9.5
Viscosity [Din 4 Cup]	13 - 60 secs
Scuff Resistance	excellent
Chemical Stability	excellent





Water-Based Varnishes

Product List



Description:

This high performance ink range has been carefully formulated with rigorous testing and precision using the best quality raw materials.

These products are designed for printing on label and narrow web machines on the corresponding substrates with all of the runability and print characteristics of solvent-based inks with the safety and environmental benefits of a water-based product.



Product List:

	Product	UPP Code	Cost per kg
1	Label Varnish	HLV001	R 46.00
2	Serviette Varnish	VRN005	R 36.00
3	Corrugated Fast Drying Varnish	VRN006	R 33.00
4	Corrugated Colloidal Varnish	VRN008	R 17.00
5	Corrugated Low Cost Varnish	VRN016	R 22.00
6	Aqua Corrugated Varnish	VRN018	R 14.00



Products Physiochemical Properties:

pH	8.5 - 9.0
Viscosity [Din 4 Cup]	18 - 22 secs
Viscosity [Sheen Krebs Viscometer 480]	250 - 300 centipoise
Chemical Stability	excellent





Material Safety Data Sheet

Flexographic Inks

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Water-based Inks (Chrome, lead, dye, solvent-free)
SYNONYMS:	Flexo inks, Aqua Inks
MANUFACTURER:	Universal Inks
E-MAIL:	info@upap.co.za
ADDRESS:	35, 4th Street, Industrial Park, Ga-Rankuwa, 0208, South Africa
EMERGENCY PHONE:	+27 12 703 5530
CHEMTREC PHONE:	-
OTHER CALLS:	-
FAX PHONE:	+27 12 703 9430
CHEMICAL NAME:	N/A
CHEMICAL FAMILY:	N/A
CHEMICAL FORMULA:	N/A
PRODUCT USE:	Flexographic Printing

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS:	N/A
EEC CLASSIFICATION:	N/A

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:	Not classified as hazardous
POTENTIAL HEALTH EFFECTS:	Not classified as hazardous
EYES:	May cause irritation, tearing and reddening
SKIN:	N/A
INGESTION:	N/A
INHALATION:	N/A
ACUTE HEALTH HAZARDS:	N/A
CHRONIC HEALTH HAZARDS:	N/A
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:	N/A
CARCINOGENICITY:	N/A



Material Safety Data Sheet

Flexographic Inks

SECTION 4: FIRST AID MEASURES

EYES:	Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes while holding the eyelids apart. Seek medical advice.
SKIN:	Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvent or thinners. Launder contaminated clothing before reuse.
INGESTION:	If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not induce vomiting. Keep patient warm and at rest and call a doctor immediately. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position.
INHALATION:	Product is not considered an inhalation hazard.
	Never give anything by mouth to an unconscious person.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR (% BY VOLUME)	UPPER:	N/A
	LOWER:	N/A
FLASH POINT:	> 65°C	
AUTOIGNITION TEMPERATURE:	N/A	
EXTINGUISHING MEDIA:	Alcohol resistant foam, carbon dioxide, dry chemical powder, water spray. Do not allow run-off from firefighting to enter drains or water courses. DO NOT USE WATER JET.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Fire will produce dense black smoke containing dangerous decomposition product (see section 10). Inhalation of dangerous decomposition products may cause serious damage to health.	
PROTECTIVE CLOTHING:	Appropriate self-contained breathing apparatus may be required.	

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Observe the protective measures listed in section 7 and 8. Exclude source of ignition and ventilate the area. Avoid breathing vapours. Exclude non-essential personnel.
ENVIRONMENTAL PRECAUTIONS:	Do not allow to enter drains or water courses. Contaminated area should be cleaned with detergent, do not use solvents. If any product enters drains or water courses the local authority should be advised immediately.
SMALL SPILLS:	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (see section 13).
LARGE SPILLS:	Dyke and pump into suitable containers for disposal in accordance with waste regulations. May be necessary to contact fire and emergency services.



Material Safety Data Sheet

Flexographic Inks

SECTION 7: HANDLING AND STORAGE

STORAGE MATERIAL:	Store in either internally coated steel or polyethylene drums and buckets.
HANDLING PRECAUTIONS:	Smoking, eating and drinking are forbidden in the storage and work area/for personal protection see section 8. Comply with the health and safety at work laws. Isolate from sources of heat, sparks and open flame. Avoid skin and eye contact by wearing the appropriate PPE.
STORAGE PRECAUTIONS:	Keep containers dry and tightly closed in a cool, well ventilated place. Keep away from oxidizing agent, strong alkaline and acid material. Keep away from source of ignition.
NOTES ON STORAGE:	Storage temperature: 5-35°C. Protect from frost.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:	Provide adequate ventilation. Where reasonable & practical this should be achieved by the use of local ventilation and good general extraction.
RESPIRATORY PROTECTION:	Product is not considered an inhalation hazard.
EYE PROTECTION:	Required when there is a risk of eye contact e.g. transferring inks from buckets.
SKIN PROTECTION:	Use plastic or rubber gloves to protect hands during prolonged exposure. Barrier creams may also be helpful, but must not be applied over contaminated skin.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	N/A
WORK HYGIENIC PRACTICES:	Please follow good hygiene practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Colour dependent on pigment used	
ODOUR:	Slight ammoniac	
PHYSICAL STATE:	Liquid	
pH AS SUPPLIED:	Between 8 and 10	
BOILING POINT:	100°C	
MELTING POINT:	N/A	
FREEZING POINT:	N/A	
VAPOR PRESSURE (mmHg):	N/A	
SPECIFIC GRAVITY (H₂O = 1):	0.8 - 1.5	
SOLUBILITY:	IN WATER:	Miscible
	IN SOLVENT:	Miscible
PERCENT SOLIDS BY WEIGHT:	Varies	



Material Safety Data Sheet

Flexographic Inks

VOLATILE ORGANIC COMPOUNDS (VOC):	N/A
VISCOSITY:	Between 16 and 20 seconds (measured using DIN 4 cup at 25°C)

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under recommended storage and handling conditions (see section 7)
CONDITIONS TO AVOID:	Sources of heat, ignition
INCOMPATIBILITY (MATERIALS TO AVOID):	Oxidizing agents, strong alkaline and strong acidic materials.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	When exposed to high temperatures, may produce hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen.
HAZARDOUS POLYMERIZATION:	N/A

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	N/A
SKIN AND EYE CONTACT:	The liquid splashed in the eyes may cause irritation and reversible damage.
CHRONIC TOXICITY:	Prolonged or repeated contact with the product may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:	Currently no data is available on the product itself however, the product should not be allowed to enter water.
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SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:	Product should be disposed of in accordance with local authority requirements. Must not be allowed to contaminate the soil or water courses.
DISPOSAL OF PACKAGING:	Empty containers should be recycled as scrap or reconditioned as appropriate. Containers that are not properly emptied must be treated as special waste.

SECTION 14: TRANSPORT INFORMATION

UN NO:	Not classified
SUBSTANCE IDENTITY NO.:	Not classified
ADR/RID CLASS:	Not classified



Material Safety Data Sheet

Flexographic Inks

ADR/RID ITEM NO.:	Not classified
IMDG - SHIPPING NAME:	Not classified
IMDG - CLASS:	Not classified
IMDG - PACKAGING GROUP:	Not classified
IMDG - MARINE POLLUTANT:	Not classified
IMDG - EMS NO.:	Not classified
IMDG - MFAG TABLE NO.:	Not classified
IATA - SHIPPING NAME:	Not classified
IATA - CLASS:	Not classified
IATA - SUBSIDIARY RISK(S):	Not classified
ADNR - CLASS:	N/A
UK - DESCRIPTION:	N/A
UK - EMERGENCY ACTION CLASS:	N/A
UK - CLASSIFICATION:	N/A
TREMCARD NO.:	N/A

SECTION 15: REGULATORY INFORMATION

EEC HAZARD CLASSIFICATION:	Not classified as hazardous
RISK PHASES:	N/A
SAFETY PHASES:	N/A
NATIONAL LEGISLATION:	N/A

SECTION 16: OTHER INFORMATION

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.



Product Conformance Document
Finished Inks

PRODUCT:
BATCH NO:

DATE:

FINISHED INK QUALITY CONTROL CRITERIA:

COLOUR TEST PASS REQUIRED:	equal to standard sample
pH REQUIRED:	8.0 - 9.0
FINENESS OF GRIND REQUIRED:	< 5.0
VISCOSITY REQUIRED (secs):	18 - 22
VISCOSITY REQUIRED (cP):	250 - 300
SCUFF LEVEL REQUIRED (10 rubs with plain white paper):	minimal or no scuff

CANNING:

NUMBER OF BUCKETS USED:	
TOTAL QUANTITY OF MATERIAL USED (kg):	

BATCH MEASUREMENT:

	COLOUR TEST: (Pass or Fail)	FINENESS OF GRIND: (microns)	pH:	TEMPERATURE: (°C)	VISCOSITY: (cP)	VISCOSITY: (secs)	SCUFF TEST: (Pass or Fail)
RESULTS							

BATCH SIGN OFF:

STOCK CONTROLLER		QUALITY CONTROLLER	
DATE COMPLETED:		DATE:	
SIGNATURE:		SIGNATURE:	