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

· **Product identifier**

· **Trade name: Series 660**

· **Article number: Series** 660

· **Relevant identified uses of the substance or mixture and uses advised against**

· **Application of the substance / the preparation** Printing inks

SUPPLIER: **Colour Components**
24 / 25 Ingleston Rd, Tingalpa QLD 4173
Tel: 1300 196 156 email: mail@colourcomponents.com.au

Emergency Information **Tel: 1300 196 156**

Poisons Information Centre Hotline
13 11 26 (Australia)
0800 764 766 (New Zealand)

2 Hazards identification

· **Classification of the substance or mixture**

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**


Xn; Harmful

R20-40: Harmful by inhalation. Limited evidence of a carcinogenic effect.


Xi; Irritant

R41: Risk of serious damage to eyes.

R10-52/53: Flammable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **Label elements**

· **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**


Xn Harmful

· **Hazard-determining components of labelling:**
Solvent naphtha (petroleum), heavy arom.

· **Risk phrases:**
10 Flammable.
20 Harmful by inhalation.
40 Limited evidence of a carcinogenic effect.
41 Risk of serious damage to eyes.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 2)

Trade name: Series 660

(Contd. of page 1)

· ***Safety phrases:***
9 Keep container in a well-ventilated place.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
25 Avoid contact with eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· ***Special labelling of certain preparations:***
Contains isocyanates. See information supplied by the manufacturer
Contains epoxy constituents. See information supplied by the manufacturer.
Contains Phenol, Polymer mit Formaldehyd, Glycidether, reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700), 1-dodecycl-2-pyrrolidone. May produce an allergic reaction.
· ***Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.

3 Composition/information on ingredients

· ***Chemical characterization: Mixtures***
· ***Description:*** Mixture of substances listed below with nonhazardous additions.

· ***Dangerous components:***

CAS: 7397-62-8 EINECS: 230-991-7	butyl glycollate Xi R41 Eye Dam. 1, H318	10-25%
CAS: 108-94-1 EINECS: 203-631-1	cyclohexanone Xn R20 R10 Flam. Liq. 3, H226; Acute Tox. 4, H332	10-25%
CAS: 1330-20-7 EINECS: 215-535-7	xylene Xn R20/21; Xi R38 R10 Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2.5-10%
CAS: 64742-94-5 EINECS: 265-198-5	Solvent naphtha (petroleum), heavy arom. Xn R40-65; N R51/53 R66-67 Asp. Tox. 1, H304	2.5-10%
CAS: 123-42-2 EINECS: 204-626-7	4-hydroxy-4-methylpentan-2-one Xi R36 Eye Irrit. 2, H319	2.5-10%
CAS: 96-48-0 EINECS: 202-509-5	gamma-butyrolactone Xn R22; Xi R36 Acute Tox. 4, H302; Eye Irrit. 2, H319	2.5-10%
CAS: 71-23-8 EINECS: 200-746-9	propan-1-ol Xi R41; F R11 R67 Flam. Liq. 2, H225; Eye Dam. 1, H318; STOT SE 3, H336	1-2.5%

(Contd. on page 3)

Trade name: Series 660

(Contd. of page 2)

CAS: 1333-86-4 EINECS: 215-609-9	Carbon black substance with a Community workplace exposure limit	1-2.5%
CAS: 54839-24-6 EINECS: 259-370-9	2-ethoxy-1-methylethyl acetate R10-67 Flam. Liq. 3, H226; STOT SE 3, H336	1-2.5%
CAS: 25068-38-6 NLP: 500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Xi R36/38; Xi R43; N R51/53 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	< 1%
CAS: 28064-14-4	Phenol, Polymer mit Formaldehyd, Glycidether Xi R36/38; Xi R43; N R51/53 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	< 1%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Xn R20-65; N R51/53 R10-66-67 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Acute Tox. 4, H332; STOT SE 3, H336	< 1%
CAS: 2687-96-9 ELINCS: 403-730-1	1-dodecycl-2-pyrrolidone C R34; Xi R43; N R50/53 Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	< 1%

· **Additional information:**
For the wording of the listed risk phrases refer to section 16.
Note P. Benzene content in Solvent naphta < 0,1%; therefore R45 "May cause Cancer" is not necessary.

4 First aid measures

· **Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 4)

Trade name: Series 660

(Contd. of page 3)

· ***Advice for firefighters***
· ***Protective equipment:***
Mouth respiratory protective device.
Wear self-contained respiratory protective device.

6 Accidental release measures

· ***Personal precautions, protective equipment and emergency procedures***
Wear protective equipment. Keep unprotected persons away.
· ***Environmental precautions:***
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· ***Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· ***Reference to other sections***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· ***Handling:***
· ***Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· ***Information about fire - and explosion protection:***
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· ***Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:*** *No special requirements.*
· ***Information about storage in one common storage facility:*** *Not required.*
· ***Further information about storage conditions:*** *Keep container tightly sealed.*
· ***Specific end use(s)*** *No further relevant information available.*

8 Exposure controls/personal protection

· ***Additional information about design of technical facilities:*** *No further data; see item 7.*

· ***Control parameters***

· ***Ingredients with limit values that require monitoring at the workplace:***	
108-94-1 cyclohexanone	
WEL	Short-term value: 20 ppm Long-term value: 10 ppm Sk
1330-20-7 xylene	
WEL	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV

(Contd. on page 5)

Trade name: Series 660

(Contd. of page 4)

123-42-2 4-hydroxy-4-methylpentan-2-one	
WEL	Short-term value: 362 mg/m³, 75 ppm Long-term value: 241 mg/m³, 50 ppm
71-23-8 propan-1-ol	
WEL	Short-term value: 625 mg/m³, 250 ppm Long-term value: 500 mg/m³, 200 ppm Sk
1333-86-4 Carbon black	
WEL	Short-term value: 7 mg/m³ Long-term value: 3.5 mg/m³

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
Butyl rubber, BR
· **Eye protection:**

Tightly sealed goggles

(Contd. on page 6)

Trade name: Series 660

(Contd. of page 5)

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Viscous
Colour:	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	77°C
· **Flash point:**	45°C (Abel Pensky)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	405°C
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Explosion limits:**	
Lower:	1.3 Vol %
Upper:	9.4 Vol %
· **Vapour pressure at 20°C:**	5 hPa
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with water:**	Fully miscible.
· **Segregation coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic at 20°C:	5000 mPas
Kinematic:	Not determined.
VOC (EC)	46.15 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

(Contd. on page 7)

Trade name: Series 660

(Contd. of page 6)

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**		
108-94-1 cyclohexanone		
Oral	LD50	1535 mg/kg (rat)
Dermal	LD50	948 mg/kg (rabbit)
Inhalative	LC50/4 h	8000 mg/l (rat)
1330-20-7 xylene		
Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** Strong irritant with the danger of severe eye injury.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Harmful to aquatic organisms
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
· **European waste catalogue** 08 03 12: waste ink containing dangerous substances

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 8)

Trade name: Series 660

(Contd. of page 7)

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **UN-Number**	
· **ADR, ADN, IMDG**	Void
· **IATA**	UN1210
· **UN proper shipping name**	
· **ADR, ADN, IMDG**	Void
· **IATA**	PRINTING INK
· **Transport hazard class(es)**	
· **ADR**	
· **Class**	Void Not restricted good in accordance ADR 2.2.3.1.5
· **ADN/R Class:**	Void
· **IMDG**	
· **Class**	Void Not restricted good in accordance to IMDG 2.3.2.5
· **IATA**	

· **Class**	3 Flammable liquids.
· **Label**	3
· **Packing group**	
· **ADR, IMDG**	Void
· **IATA**	III
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

15 Regulatory information

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.

(Contd. on page 9)

Trade name: Series 660

(Contd. of page 8)

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R22 Harmful if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Product safety department
· **Contact:**
Richard Gähwiler
richard.gaehwiler@printcolor.ch

GB

End of MSDS