

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

- 1.1 **Product identifier**
- Trade name:** 36-20-B4 red
- Registration number**
The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH)
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified
- Application of the substance / the mixture** Rollerball Ink
- 1.3 **Details of the supplier of the safety data sheet**
- Manufacturer/Supplier:**
SHANGHAI DOKUMENTAL INK Co. Ltd.
No. 38 Lane 451 Mao Jia Road
Luodian Town, Baoshan District
Shanghai 201908 , P.R. China
Tel.: 86-21-66864551 / 66864542
- Further information obtainable from:**
Ms. Cindy Song
Email: cindy.song@dokumental.cn
- 1.4 **Emergency telephone number:**
Mr. Bruce Gindelberger
Tel.: mobile +86-13917914495
Email: bruce.gindelberger@dokumental.cn

SECTION 2: Hazards identification

- 2.1 **Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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



Xn; Harmful

R22: Harmful if swallowed.

- 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.
- 2.2 **Label elements**
- Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms**



GHS08

- Signal word** Warning
- Hazard-determining components of labelling:**
ethanediol
- Hazard statements**
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
- Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 **Other hazards**
- Results of PBT and vPvB assessment**
- PBT:** Not applicable.
- vPvB:** Not applicable.

Trade name: 36-20-B4 red

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
Mixture of the following substances, containing non-hazardous substances and colouring agents.
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

CAS: 107-21-1 EINECS: 203-473-3	ethanediol Xn R22 STOT RE 2, H373; Acute Tox. 4, H302	25-50%
CAS: 18472-87-2 EINECS: 242-355-6	C.I. Acid Red 92 N R50 Aquatic Acute 1, H400	≤ 2,5%
CAS: 17372-87-1 EINECS: 241-409-6	C. I. ACID RED 87	≤ 2,5%

- Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 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; consult doctor in case of complaints.
- 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: Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 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.
- 6.4 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about fire - and explosion protection: No special measures required.
- 7.2 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: None.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

(Contd. on page 3)

Trade name: 36-20-B4 red

(Contd. of page 2)

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

107-21-1 ethanediol (25-50%)

IOELV	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin
-------	--

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

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.

· 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:

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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	According to product specification
Odour:	Product specific
Odour threshold:	Not determined.

· Important information on protection of health and environment, and on safety.

-
-

· pH-value: 7,3-7,9

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C

· Flash point: 111 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 400 °C

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:

Lower:	3,2 Vol %
Upper:	53,0 Vol %

· Vapour pressure at 20 °C: 23 hPa

· Density at 20 °C: 1,109-1,119 g/cm³

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

(Contd. on page 4)

Trade name: 36-20-B4 red

(Contd. of page 3)

- | | |
|--|--|
| · Viscosity:
Dynamic at 20 °C:
Kinematic: | 5,7-6,3 mPas
Not determined. |
| · Solvent content:
Organic solvents:
Water: | 10,0 %
40,2 % |
| · Solids content: | 6,5 % |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

107-21-1 ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rbt)

- **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
- **Sensitisation:** No sensitising 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

SECTION 12: Ecological information

- 12.1 Toxicity
- **Aquatic toxicity:** No further relevant information available.
- 12.2 **Persistence and degradability** No further relevant information available.
- 12.3 **Bioaccumulative potential** No further relevant information available.
- 12.4 **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 12.5 **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- 12.6 **Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

EU
(Contd. on page 5)

Trade name: 36-20-B4 red

(Contd. of page 4)

SECTION 14: Transport information

- 14.1 UN-Number
· ADR, ADN, IMDG, IATA Void
- 14.2 UN proper shipping name
· ADR Void
· ADN, IMDG, IATA Void
- 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class Void
- 14.4 Packing group
· ADR, IMDG, IATA Void
- 14.5 Environmental hazards:
· Marine pollutant: No
- 14.6 Special precautions for user Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- UN "Model Regulation": -

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	50-100
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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**
H302 Harmful if swallowed.
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
H400 Very toxic to aquatic life.
- R22 Harmful if swallowed.
R50 Very toxic to aquatic organisms.
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
- * Data compared to the previous version altered.