Safety Data Sheet acc. to OSHA HCS

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- 1 Identification · Product identifier
- · Trade name: 46-63-A Violet Blue
- · 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
- · 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

Information department:

Ms. Cindy Song

Email: cindy.song@dokumental.cn

Emergency telephone number:

Mr. Bruce Gindelberger

Tel.: mobile +86-13917914495

Email: bruce.gindelberger@dokumental.cn

24-hour-Emergency- Telephone-Number (GBK Contract ID: 94050): (001) 352 323 3500

2 Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

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

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).



- · Signal word Warning
- · Hazard-determining components of labeling:

· Hazard statements

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

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Get medical advice/attention if you feel unwell.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 1Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

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3 Composition/information on ingredients

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

ı	· Dangerous	· Dangerous components:		
	107-21-1	ethanediol	50-100%	
ı	4129-84-4	C. I. Acid Violet 17	≤ 2.5%	

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

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; 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.
- \cdot ${\bf After\ swallowing:}$ Immediately call a doctor.
- · Information for doctor:
- \cdot 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 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: 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 protection against explosions and fires: No special measures required.
- · 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.
- \cdot Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

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Trade name: 46-63-A Violet Blue

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· Control parameters

· Components with limit values that require monitoring at the workplace: 107-21-1 ethanediol (50-100%) TLV Short-term value: C 100 mg/m³ Н

- · Additional information: The lists that were valid during the creation were used as basis.
- · 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.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties	
 Information on basic physical and chemical properties General Information Appearance: 	perties
Form:	Fluid
Color:	According to product specification
. Odor:	Product specific
Odour threshold:	Not determined.
· Important information on protection of health	and
environment, and on safety.	-
· pH-value:	7-8
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· Flash point:	111 °C (232 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	410 °C (770 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	3.2 Vol %
Upper:	53.0 Vol %
· Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
· Density at 20 °C (68 °F):	1.084-1.094 g/cm³ (9.046-9.129 lbs/gal)
· 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.
· Viscosity:	
Dynamic at 20 °C (68 °F):	4.7-5.7 mPas
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Trade name: 46-63-A Violet Blue

Kinematic: Not determined.

Solvent content:
Organic solvents:
Water: 40.2 %

Solids content: 1.8 %
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.

- \cdot Possibility of hazardous reactions $\mbox{\it No}$ 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.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect
- \cdot Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (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.

- \cdot Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- \cdot Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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(Contd. of page 4)

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
	v 01 u	
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	Void	
· Packing group · DOT, ADR, IMDG, IATA	Void	
· Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

107-21-1 ethanediol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

107-21-1 ethanediol

A4

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

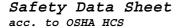
· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labeling: ethanediol

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Printing date 04/13/2015 Reviewed on 04/13/2015





Trade name: 46-63-A Violet Blue

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· Hazard statements

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

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray. Get medical advice/attention if you feel unwell.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	50-100

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 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.

- · Date of preparation / last revision 04/13/2015 / -
- · 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 Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

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

ADR: Accord européen sur le transport des marchandises dangereuses par Rout of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
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)
NFPA: National Fire Protection Association (USA)
HWIS: Hazardous Materials Identification System (USA)

HMIS: Hazardous Materials Identification System (USA) STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

* Data compared to the previous version altered.

USA