

SDS Report

Client's name:

Client's address:

SGS Ref No. : Product Name: End Uses: Composition/Ingredient:

Job Receiving Date: Preparation Period:

Service Requested Safety Data Sheet for the Product

SUMMARY

No. SHAHG1107903505

Date: Jun. 8, 2011

Page 1 of 1

SHANGHAI NNW NEW MATERIALS TECHNOLOGY CO,. LTD. ROOM 106,NO 33 LE SHAN RD, XUHUI DISTRICT, SHANGHAI

SHHG1105012664SD HIGHLIGHTER INK - DYE(CLB) TO WRITE SEE SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS ON THE NEXT PAGE May 27, 2011 May 27– June 3, 2011

The contents and format of this MSDS/SDS are in accordance with REGULATION (EC) No 1272/2008, REGULATION (EC) No 1907/2006, EU Commission Directive 1999/45/EC, 67/548/EEC.

Signed for and on behalf of SGS-CSTC Chemical Laboratory

Lindy Liu

Lindy Liu Lab Manager

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Standards Technical Server (Shanghai) Co.,Ltd.

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

- · Product identifier
- · Trade name: <u>Highlighter ink-dye(CLB)</u>
- Article number: Data not available
- **Registration number:** Data not available
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance/ the preparation: to write
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:
- Shanghai NNW New Materials Technology Co,. Ltd. Room 106,No 33 LE Shan Rd, XuHui District, Shanghai Tel: 021-64476059
- Fax:021-64476096
- · Only Representative / other EU contact point European Union Member State contact not available.
- Further information obtainable from: Shanghai NNW New Materials Technology Co,. Ltd.
- Emergency telephone number: 021-64476065-610
- · Email: sales@nnwchina.com
- · Reference number: SHHG1105012664SD; SHAHG1107903505

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008
- The product is not classified according to the CLP regulation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Not applicable
- Hazard pictograms Not applicable
- · Signal word Not applicable
- · Hazard-determining components of labelling: Not applicable
- · Hazard statements Not applicable
- **Precautionary statements** Not applicable
- · Other hazards Not applicable
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable
- **vPvB:** Not applicable

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

| · Dangerous components: | | | | |
|-------------------------------------|---|------------|--|--|
| CAS: 56-81-5 EINECS: 200-289-5 | glycerol | 10,0% | | |
| · Non-dangerous com | ponent: | | | |
| CAS: 2650-18-2 EINECS: 220-168-0 | diammonio(ethyl)[4-[[4-[ethyl(3-sulphonatobenzyl)amino]phenyl](2- sulphonatophenyl)methylene]cyclohexa-2,5-dien-1-ylidene](3- sulphonatobenzyl)ammonium | 1,0% | | |
| CAS: 7732-18-5 EINECS: 231-791-2 | water | 89,0% | | |
| | (Contd. | on page 2) | | |

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· Remark:

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diammonio(ethyl)[4-[[4-[ethyl(3-sulphonatobenzyl)amino]phenyl](2-sulphonatophenyl)methylene] cyclohexa-2,5-dien-1-ylidene](3-sulphonatobenzyl)ammonium (CAS No. 2650-18-2) synonym: Acid blue 9

4 First aid measures

· Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing:

Rinse mouth with water.

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: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment:
- Mouth respiratory protective device. Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation

Avoid breathing vapors, mist or gas.

• 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).

- · 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: Normal measures for preventive fire protection.
- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions:

Keep contaniner tightly closed in a dry and well-ventilated place.

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• 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 work | place: |
|---|--------|
|---|--------|

56-81-5 glycerol

| MAK (Germany) | 50E mg/m ³ |
|--------------------------------------|-----------------------|
| | vgl.Abschn.Xc |
| MAK (Germany) WEL (Great Britain) | $10 mg/m^3$ |
| VME (France) | 10 mg/m ³ |

- · DNELs: Data not available
- · PNECs: Data not available
- Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Based on composition shown in Section 3, the following messures are suggested for occupational safety measure:
- · Personal protective equipment:
- \cdot General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- Respiratory protection: Suitable respiratory protective device recommended.
- 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- General Information
- · Appearance:
 - Form: Colour:

Liquid Blue

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| | (Contd. of pa | age |
|--------------------------------------|---|-----|
| Odour: | Odourless | |
| Odour threshold: | Data not available. | |
| pH-value: | Data not available. | |
| Change in condition | | |
| Melting point/Melting range: | Data not available. | |
| Boiling point/Boiling range: | Data not available | |
| Freezing point: | Data not available | |
| Flash point: | Data not available | |
| Flammability (solid, gaseous): | Data not available | |
| auto-Ignition temperature: | Data not available | |
| Decomposition temperature: | Date not available. | |
| Self-igniting: | Product is not selfigniting. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: | | |
| Lower: | Data not available. | |
| Upper: | Data not available. | |
| Oxidizing properties | Data not available. | |
| Vapour pressure: | Data not available. | |
| Density: | Data not available. | |
| Relative density | Data not available. | |
| Vapour density | Data not available. | |
| Evaporation rate | Data not available. | |
| Solubility in / Miscibility with | | |
| water: | Data not available | |
| Partition coefficient (n-octanol/wat | er): Data not available. | |
| Viscosity: | | |
| Dynamic: | Data not available. | |
| Kinematic: | Data not available. | |
| Other information | No further relevant information available. | |

10 Stability and reactivity

• *Reactivity* No decomposition if used according to specification.

- · Chemical stability Stable under recommended storage conditions.
- $\cdot \textit{Possibility of hazardous reactions} \ \textit{No dangerous reactions known}.$
- Conditions to avoid No further relevant information available.
- *Incompatible materials: No further relevant information available.*
- $\cdot \textit{Hazardous decomposition products:} No \ dangerous \ decomposition \ products \ known.$

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

56-81-5 glycerol

Oral LD50 4090 mg/kg (mouse)

12600 mg/kg (rat)

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27000 mg/kg (rabbit)

7732-18-5 water

Oral LD50 90000 mg/kg (rat)

• Primary irritant effect:

- on the skin: Irritating effect possible.
- on the eye: Irritating effect possible.
- · Sensitization: Sensitization possible.
- · Toxicokinetics, metabolism and distribution No further relevant information availabe.
- · Acute effects (acute toxicity, irritation and corrosivity) No further relevant information availabe.
- *Repeated dose toxicity No further relevant information availabe.*
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) No further relevant information availabe.

12 Ecological information

- · Toxicity
- Acquatic 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.
- 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.
- · 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 Smaller quantities can be disposed of with household waste.
- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Danger code (Kemler): -
- · UN-Number:
- · Packaging group:
- · Hazard label:
- · UN proper shipping name:
- \cdot Limited quantities (LQ)
- Transport category -• Tunnel restriction code -
- · Maritime transport IMDG:
- · IMDG Class:
- · UN Number:

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| | (Co | ontd. of page 5) |
|--|---|------------------|
| · Label | - | |
| · Packaging group: | - | |
| · EMS Number: | - | |
| • Marine pollutant: | No | |
| • Proper shipping name: | · - | |
| · Air transport ICAO-TI | and IATA-DGR: | |
| · ICAO/IATA Class: | - | |
| · UN/ID Number: | - | |
| · Label | - | |
| Packaging group: | - | |
| • Proper shipping name: | · - | |
| • UN ''Model Regulation • Special precautions for • Transport in bulk acco | | |
| 15 Regulatory inform | ation | |
| · Safety, health and envi · Sara | ronmental regulations/legislation specific for the substance or mixture | |
| · Section 355 (extremely | hazardous substances): | |
| None of the ingredients | is listed. | |
| · Section 313 (Specific to | oxic chemical listings): | |
| None of the ingredients | is listed. | |
| · TSCA (Toxic Substanc | es Control Act): | |
| All ingredients are liste | <i>d</i> . | |
| D | | |

· 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.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concerntration)

None of the ingredients is listed.

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

None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· National regulations:

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

· Other regulations, limitations and prohibitive regulations

· Candidate List of Substances of very high concern (SVHC) according to ECHA (15/12/2010)

None of the ingredients is listed.

· REACH Regulation Annex XVII Restriction(22/6/2009)

None of the ingredients is listed.

· REACH Regulation Annex XIV Authorization List(17/2/2011)

None of the ingredients is listed.

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

16 Other information

The contents and format of this MSDS/SDS are in accordance with REGULATION (EC) No 1272/2008, REGULATION (EC) No 1907/2006 and EU Commission Directive 1999/45/EC, 67/548/EEC.

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· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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