MATERIAL SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/ /undertaking

Identification of the substance or preparation
Trade name

HIGHLIGHTER VIOLET

Use of the substance/preparation
HIGHLIGHTER INK

Company/undertaking identification
Address

HAINENKO LIMITED
284 Chase Road,
Southgate,
London, N14 6HF

Emergency telephone/E-mail

Tel: 0044 20 8882 8734 d.ashpole@hainenko.com

2. Composition / information on ingredients

Ingredient name	CAS No	%	EINECS No	Classification
WATER	7732-18-5	45.5	215-185-5	R36/38
Styrene-Acrylonitrile Copolymer	9003-54-7	31.0	-	R21/22
Glycerin	56-81-5	22	200-289-5	S24/25
Rhodamine 6G	989-38-8	1.2	213-584-9	-
Basic blue 3	55840-82-9	0.3	-	-

3. Hazards identification

Classification

R21/22 Harmful in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin

Hazard symbols

R phrases

R21/22 Harmful in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin

4. First aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated

clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from exposure immediately.
Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

After skin contact

Remove contaminated clothing, jewelry and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains(at least 15~20 minutes). Get medical attention, if needed.

After eye contact

Separate eyelids, Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

After ingestion

Contact local poison control center or physician immediately.
Never make an unconscious person vomit or drink fluids.
When vomiting occurs, keep head lower than hips to help prevent aspiration.
If person is unconscious, turn head to side.
Get medical attention immediately.

5. Fire-fighting measures

extinguishing media

Carbon dioxide; Regular dry chemical; Water

Fire and explosion hazard

Severe fire hazard. The vapor is heavier than air.
Vapor or gases may ignite at distant ignition sources and flash back.
Vapor/air mixtures are explosive.

Special protective equipment for fire-fighters

Use self-contained breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet. Suppres gases/vapours/mists with water spray jet.

6. Accidental release measures

Personal precautions

Avoid contact with skin, eyes and clothing.
Stay upwind and keep out of low areas.
Ensure adequate ventilation. Keep away sources of ignition.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Absorb with sand or other non-combustible material.
Collect spilled material in appropriate container for disposal.

7. Handling and storage

Handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions.
The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Take precautionary measures against static charges.
Keep away from sources of heat and ignition.

Storage

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Advice on storage assembly

Do not store together with:
Acids
Alcalies
Oxidizing agents

Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

Recommended storage temperature

-5 ° C UP

8. Exposure controls / personal protection

2000/39/EWG

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this p articular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.
Appropriate Material butyl rubber
Material thickness 0,5 mm
Breakthrough time > 240 min.

Eye protection

Safety glasses with side protection shield (EN 166)

Skin protection

Clothing as usual in the chemical industry.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale vapours. Clean skin thoroughly after work; apply skin cream.

9. Physical and chemical properties

General information

Form liquid
Colour Violet
Odour Water-like

Important health, safety and environmental information

Changes in physical state

Type Boiling point
Value 100 – 105°C
Pressure 1013 hPa

Specific gravity

Value 1.04 – 1.12 g/cm³
Reference temperature 20 °C

Viscosity

Value 3.0 – 7.0 cps
Method BL TYPE
Reference temperature 25 °C

pH
Value 4.5 – 7.0
Reference temperature 25 °C
Other information
The physical data is that of the main components.

10. Stability and reactivity

Materials to avoid
Acids; Alcalis; Oxidizing agents: Water
Hazardous decomposition products
No hazardous decomposition products known.

11. Toxicological information

Experience in practice
Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness.
Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin.
Other information (chapter 4.)
Product specific toxicological data are not known.

12. Ecological information

Other adverse effects
Ecological data are not available.
Do not discharge product unmonitored into the environment.

13. Disposal considerations

Product
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.
Packaging
Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

14. Transport information

Land transport ADR/RID
Not Application
Marine transport IMDG
Not Application
Air transport ICAO/IATA
Not Application

15. Regulatory information

Labelling in accordance with EC directives
The product is classified and labelled in accordance with EC Directive 1999/45/EC.

Hazard symbols

R phrases

R21/22	Harmful in contact with skin and if swallowed.
R36/38	Irritating to eyes and skin

16. Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.
Regulation (EC) No 1907/2006 (REACH) as amended in each case.
EC Directives 2000/39/EC, 2006/15/EC as amended in each case.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Relevant R-phrases (chapter 3):

R21/22	Harmful in contact with skin and if swallowed.
R36/38	Irritating to eyes and skin