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

- · Product identifier
- · Trade name: 46-63-A2 Violet Blue
- Registration number
- The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH) • Relevant identified uses of the substance or mixture and uses advised against
- Currently no such applications are identified
- · Application of the substance / the preparation Rollerball Ink
- \cdot Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Quantum International

- 918389 5 Star Premier Liquid Finliner Blue
- 918486 5 Star Premier Liquid Rollerball Blue

2 Hazards identification

· Classification of the substance or mixture

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.

· 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: ethanediol
- Risk phrases: 22 Harmful if swallowed.

· Safety phrases:

- 23 Do not breathe vapour.
- 36 Wear suitable protective clothing.
- 60 This material and its container must be disposed of as hazardous waste.
- Other hazards
- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

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

(Contd. on page 2)

Trade name: 46-63-A2 Violet Blue

· Dangerous components:				
CAS: 107-21-1 EINECS: 203-473-3	ethanediol	Xn R22 Acute Tox. 4, H302	50-100%	
CAS: 4129-84-4	C. I. Acid Violet 17	N R51/53	≤ 2,5%	
Additional inform	tion: For the wording of the lister	Aquatic Chronic 2, H411		

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.
- · After swallowing: Call for a doctor immediately.
- 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: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
 Environmental precautions: 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: 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.
- · 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.

(Contd. on page 3)

Trade name: 46-63-A2 Violet Blue

*

	l parameters	
	ients with limit values that require moni	toring at the workplace:
	-1 ethanediol (50-100%)	
IOELV	Short-term value: 104 mg/m ³ , 40 ppm	
	Long-term value: 52 mg/m³, 20 ppm Skin	
Additio	onal information: The lists valid during	the making were used as basis.
Exposu	re controls	-
-	al protective equipment:	
	l protective and hygienic measures:	
-	way from foodstuffs, beverages and feed. ands before breaks and at the end of work	
	and's before breaks and at the end of work atory protection:	
In case longer	e of brief exposure or low pollution use exposure use self-contained respiratory ;	respiratory filter device. In case of intensive or protective device.
The glo		sistant to the product/ the substance/ the
		love material can be given for the product/ the
	ion of the glove material on consideration	n of the penetration times, rates of diffusion and th
Materia	al of gloves	
of qua substa to be o	lity and varies from manufacturer to manu. nces, the resistance of the glove materia checked prior to the application.	nly depend on the material, but also on further marks facturer. As the product is a preparation of several l can not be calculated in advance and has therefore
	ation time of glove material	
	act break trough time has to be found out observed.	by the manufacturer of the protective gloves and has
	otection: Goggles recommended during refi	lling
Physi	cal and chemical properties	
Informa Genera	ation on basic physical and chemical prop l Information	prties
Informa General Appeara	ation on basic physical and chemical prop l Information ance:	
Informa Genera Appeara Form	ation on basic physical and chemical prop l Information ance:	Fluid Violet
Informa Genera Appeara Form	ation on basic physical and chemical prop l Information ance: m: our:	Fluid
Informa General Appeara Forn Colo Odour:	ation on basic physical and chemical prop l Information ance: m: our:	Fluid Violet
Informa Genera Appeara Forn Colo Odour: Odour	ation on basic physical and chemical prop l Information ance: m: our:	Fluid Violet Product specific Not determined.
Informa Genera Appeara Forr Colo Odour: Odour: Importa	ation on basic physical and chemical prop 1 Information ance: m: our: threshold:	Fluid Violet Product specific Not determined.
Informa General Appears Forn Colo Odours Odours Importa environ	ation on basic physical and chemical prop 1 Information ance: m: our: threshold: ant information on protection of health an nment, and on safety.	Fluid Violet Product specific Not determined.
Informa General Appears Forn Colo Odours Odours Importa environ	ation on basic physical and chemical prop 1 Information ance: m: our: threshold: ant information on protection of health a	Fluid Violet Product specific Not determined.
Informa General Appeara Forn Colo Odour: Odour: Odour i Importa environ pH-valu Change	ation on basic physical and chemical prop 1 Information ance: m: our: threshold: ant information on protection of health a nment, and on safety. ue at 25°C: in condition	Fluid Violet Product specific Not determined. - - 7,3-8,3
Informa General Appeara Forn Coldour: Odour: Odour: Importa environ pH-valu Change Melt	ation on basic physical and chemical prop 1 Information ance: m: our: threshold: ant information on protection of health a nment, and on safety. ue at 25°C: in condition ting point/Melting range:	Fluid Violet Product specific Not determined. 7,3-8,3 Undetermined.
Informa General Appeara Forr Cold Odour: Odour: Odour Importa environ pH-valu Change Melt Boil	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health as nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Boiling range:	Fluid Violet Product specific Not determined. - - 7,3-8,3 Undetermined. 100°C
Informa General Appeara Forr Colo Odour: Odour: Importa environ pH-valu Change Mela Boil Flash p	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health and nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Boiling range: point:	Fluid Violet Product specific Not determined. - 7,3-8,3 Undetermined. 100°C 111°C
Informa General Appeara Forr Colo Odour: Odour: Importa environ pH-valu Change Mela Boil Flash p	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health as nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Boiling range:	Fluid Violet Product specific Not determined. - - 7,3-8,3 Undetermined. 100°C
Informa General Appeara Forn Coldour: Odour: Odour a Importa environ pH-valu Change Melu Boil Flash p Flammal	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health and nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Boiling range: point:	Fluid Violet Product specific Not determined. - 7,3-8,3 Undetermined. 100°C 111°C
Informa General Appeara Forn Cold Odour: Odour a environ PH-valu Change Mela Boi Flash p Flammal Ignitic	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health as nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: point: bility (solid, gaseous):	Fluid Violet Product specific Not determined. - - 7,3-8,3 Undetermined. 100°C 111°C Not applicable.
Informa General Appears Forn Colo Odours Odours Importa environ PH-valu Change Mela Boi Flash p Flash p Flammal Ignitic	ation on basic physical and chemical prop 1 Information ance: m: our: threshold: ant information on protection of health as nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: point: bility (solid, gaseous): on temperature:	Fluid Violet Product specific Not determined. - - 7,3-8,3 Undetermined. 100°C 111°C Not applicable. 410°C
Informa General Appeara Forn Coldour: Odour: Odour a Importa environ pH-valu Change Melt Boil Flash p Flammal Ignitic Decompo	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health and nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: point: bility (solid, gaseous): on temperature: osition temperature:	<pre>Fluid Violet Product specific Not determined. d 7,3-8,3 Undetermined. 100°C 111°C Not applicable. 410°C Not determined.</pre>
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Informa General Appeara Forn Coldour: Odour: Odour i Importa environ PH-valu Change Meli Boil Flash p Flammal Ignitic Decompo Self-ig Danger Explos:	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health as nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: point: bility (solid, gaseous): on temperature: osition temperature: gniting: of explosion: ion limits: er:	Fluid Violet Product specific Not determined. 7,3-8,3 Undetermined. 100°C 111°C Not applicable. 410°C Not determined. Froduct is not selfigniting. Product does not present an explosion hazard.
Informa General Appears Forr Cold Odour: Odour: Importa environ PH-valu Change Meli Boi Flash p Flash p Flash p Flash p Self-ig Danger Explos Lowe	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health as nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: point: bility (solid, gaseous): on temperature: osition temperature: gniting: of explosion: ion limits: er:	<pre>Fluid Violet Product specific Not determined. 7,3-8,3 Undetermined. 100°C 111°C Not applicable. 410°C Not applicable. 410°C Not determined. Product is not selfigniting. Product is not selfigniting. Product does not present an explosion hazard. 3,2 Vol %</pre>
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Informa General Appears Forn Cold Odour: Odour Importa environ PH-valu Change Mela Boi Flash p Flash p Flash p Flash p Flash p Explose Lowe Uppe Vapour Density Relatio	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health and nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: ling point/Boiling range: point: bility (solid, gaseous): on temperature: osition temperature: gniting: of explosion: ion limits: er: er: pressure at 20°C: y: ve density	<pre>Fluid Violet Product specific Not determined.</pre>
Informa General Appeara Forn Cold Odour: Odour a environ PH-valu Change Mela Boi Change Mela Boi Flash p Flammal Ignitic Decompo Self-ig Danger Explos Lowe Uppe	ation on basic physical and chemical proper l Information ance: m: our: threshold: ant information on protection of health at nment, and on safety. ue at 25°C: in condition ting point/Melting range: ling point/Melting range: point: bility (solid, gaseous): on temperature: osition temperature: gniting: of explosion: ion limits: er: er: pressure at 20°C: y:	<pre>Fluid Violet Product specific Not determined.</pre>

according to 1907/2006/EC, Article 31

Trade name: 46-63-A2 Violet Blue

	(Contd. of page
· Solubility in / Miscibility with	
water:	Fully miscible.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic at 25°C:	4,7-5,7 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	53,5 %
Water:	40 %
Solids content:	5 %
• 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.

11 Toxicological information

- · 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)

4129-84-4 C. I. Acid Violet 17

Oral LD50 5005 mg/kg (rat)

· Primary irritant effect:

- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · 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

12 Ecological information

Toxicity

- · Acquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- \cdot $Bioaccumulative \ potential$ 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.

(Contd. on page 5)

EU

(Contd. of page 4)

EU

13 Disposal considerations

- · 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.
- \cdot Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- Maritime transport IMDG:
- IMDG Class:
- Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -
- Packaging group:
- · 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

- · 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.
- · 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

- H302 Harmful if swallowed.
- H411 Toxic to aquatic life with long lasting effects.
- R22 Harmful if swallowed.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- \cdot * Data compared to the previous version altered.