Version 1

Product Name Ballpen inks blue

Issue Date 26-Oct-2016 Revision date 26-Oct-2016

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

# 1.1. Product identifier

Product NameBallpen inks blueREACH registration numberNo information available

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Ballpen ink
Uses advised against	No information available

## 1.3. Details of the supplier of the safety data sheet

Supplier	Suzhou Xiongying Ink Technology Co., Ltd
Address	Yunli road NO539 economic development zone of wujiang city jiangsu province
	China
Postal Code	215217
Phone	+86-512-63331385
FAX	+86-512-63320778
E-mail	zhangshenghong001@126.com

Importer Address Postal Code Phone FAX E-mail

1.4. Emergency telephone number

+86-512-63331385

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] (H331) - (H332) Serious eye damage/eye irritation Category 2 - (H319)

## 2.2. Label elements

Symbols/Pictograms

Signal word Hazard Statements Precautionary Statements Warning H319 - Causes serious eye irritation P264 - Wash face, hands and any exposed skin thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention

EU Specific Hazard Statements None.

## 2.3. Other hazards

No information available

## SECTION 3: Composition/information on ingredients

#### 3.1 Mixture

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Phenoxy Ethanol	204-589-7	122-99-6	25	Eye Irrit. 2 (H319)
Solvent blue38	215-523-1	13128-51-4	15	Not classified
BX	205-685-1	147-14-8	15	Not classified
Benzyl alcohol	202-859-9	100-51-6	15	Acute Tox. 4 (H332 Eye Irrit. 2 (H319)
1,2-propanediol	610-038-5	4254-14-2	10	Not classified
Keton resin	607-515-5	25054-06-2	10	Not classified
Castor oil resin	-	66070-88-0	5	Not classified
Triethanolamine	203-049-8	102-71-6	4	Not classified
Phosphric acid ester	291-933-4	90506-69-7	1	Not classified

## SECTION 4: First aid measures

## 4.1. Description of first aid

measures General advice

Remove contaminated clothing and shoes. If symptoms persist, call a physician.

## Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

#### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

#### Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

#### Self-protection of the first aider

First aider: Pay attention to self-protection. Use personal protection recommended in Section 8.

# 4.2. Most important symptoms and effects, both acute and delayed

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

No information available.

## 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### **5.3. Advice for firefighters**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas.

## 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

## 6.4. Reference to other sections

See Section 7 for more information See section 8 for more information See section 13 for more information

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protection recommended in Section 8.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep locked up and out of reach of children. Store in accordance with local regulations.

## 7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Chemical Name	Australia	Austria	Belgium	Denmark	European Union
2-Phenoxy Ethanol (CAS #:	-	Skin	-	-	-
122-99-6)		STEL 20 ppm			
		STEL 110 mg/m <sup>3</sup>			
		TWA: 20 ppm			
		TWA: 110 mg/m <sup>3</sup>			
		Ceiling 20 ppm			
		Ceiling 110 mg/m <sup>3</sup>			
BX (CAS #: 147-14-8)	-	STEL 4 mg/m <sup>3</sup>	-	-	-
		STEL 0.4 mg/m <sup>3</sup>			
		TWA: 1 mg/m <sup>3</sup>			
		TWA: 0.1 mg/m <sup>3</sup>			

Triethanolamine (CAS #:	5 mg/m <sup>3</sup>	STEL 1.6 ppm	-	TWA: 0.5 ppm	-
102-71-6)	5	STEL 10 mg/m <sup>3</sup> TWA: 0.8 ppm		TWA: 3.1 mg/m <sup>3</sup>	
		TWA: 5 mg/m <sup>3</sup>			

Chemical Name	Latvia	France	Finland	Germany	Italy
2-Phenoxy Ethanol (CAS #:		-	TWA: 20 ppm	TWA: 20 ppm	-
122-99-6)			TWA: 110 mg/m <sup>3</sup>	TWA: 110 mg/m <sup>3</sup>	
			STEL: 50 ppm	Ceiling / Peak: 40 ppm	
			STEL: 290 mg/m <sup>3</sup>	Ceiling / Peak: 220	
			Skin	mg/m <sup>3</sup>	
				Skin	
BX (CAS #: 147-14-8)	TWA: 5 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup>	-	-
Benzyl alcohol (CAS #:	TWA: 5 mg/m <sup>3</sup>	-	TWA: 10 ppm	-	-
100-51-6)			TWA: 45 mg/m <sup>3</sup>		
Triethanolamine (CAS #:		-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	-
102-71-6)			-	Ceiling / Peak: 20	
				mg/m <sup>3</sup>	

Chemical Name	Poland	Portugal	Spain	Switzerland	Netherlands
2-Phenoxy Ethanol (CAS #: 122-99-6)	TWA: 230 mg/m <sup>3</sup>	-	-	Skin STEL: 40 ppm STEL: 220 mg/m <sup>3</sup> TWA: 20 ppm TWA: 110 mg/m <sup>3</sup>	-
Benzyl alcohol (CAS #: 100-51-6)	TWA: 240 mg/m <sup>3</sup>	-	-	-	-

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
BX (CAS #: 147-14-8)	-	-	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-	IDLH: 100 mg/m <sup>3</sup> Cu dust and mist TWA: 1 mg/m <sup>3</sup> Cu dust and mist
Triethanolamine (CAS #: 102-71-6)	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup>	-	-

## Derived No Effect Level (DNEL)

No information available

## Predicted No Effect Concentration (PNEC)

No information available

## 8.2. Exposure controls

Engineering Controls

Showers. Eyewash stations. Ventilation systems. Ensure adequate ventilation, especially in confined areas.

## Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand Protection	Wear protective gloves.
Skin and body protection	Suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	None under normal processing

## Environmental exposure controls

Avoid release to the environment.

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical pro	operties
Appearance	Liquid
Color	blue

Odor **Odor Threshold** bΗ Melting point/freezing point Boiling point / boiling range Flash point **Evaporation rate** Flammability (solid, gas) **Explosive limits** Flammability Limit in Air Vapor Pressure Vapor density **Relative density** Partition coefficient (LogPow) Autoignition temperature **Decomposition temperature Kinematic viscosity** Dynamic viscosity **Explosive properties Oxidizing properties** 

No information available Not determined Not an explosive Not determined

**9.2. Other information** No information available

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No information available.

## 10.2. Chemical stability

Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

None under normal processing.

## 10.4. Conditions to avoid

Heat, flames and sparks.

#### 10.5. Incompatible materials

None known based on information supplied.

## **10.6. Hazardous decomposition products**

None under normal use conditions.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological

effects	Acute	toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Phenoxy Ethanol (CAS #: 122-99-6)	= 1260 mg/kg (Rat)	= 5 mL/kg (Rabbit)	-
Benzyl alcohol (CAS #: 100-51-6)	= 1230 mg/kg (Rat) 1.55 mL/kg bw(Rat) male mL/kg bw (Rat)	= 2 g/kg (Rabbit) < 5000 mg/kg bw (Guinea pig)	= 8.8 mg/L 4h(Rat) > 4178 mg/m³air 4h(Rat)
Triethanolamine (CAS #: 102-71-6)	= 4190 mg/kg (Rat)	> 16 mL/kg (Rat) > 20 mL/kg (Rabbit)	-

## Skin corrosion/irritation

Non-irritating to the skin.

## Serious eye damage/eye irritation

Causes serious eye irritation.

## Sensitization

No sensitization responses were observed.

## Germ cell mutagenicity

No information available.

#### Carcinogenicity

Chemical Name European Union		IARC
Triethanolamine (CAS #: 102-71-6)	-	Group 3

## **Reproductive toxicity**

No information available.

## STOT - single exposure

No information available.

### **STOT - repeated exposure**

No information available.

#### Aspiration hazard

No information available.

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
2-Phenoxy Ethanol (CAS #:	500: 72 h Desmodesmus	337 - 352: 96 h Pimephales	500: 48 h Daphnia magna mg/L
122-99-6)	subspicatus mg/L EC50	promelas mg/L LC50	EC50
		flow-through 366: 96 h	
		Pimephales promelas mg/L	
		LC50 static 220 - 460: 96 h	
		Leuciscus idus mg/L LC50 static	
BX (CAS #: 147-14-8)	-	100: 48 h Oryzias latipes mg/L	-
		LC50 static	
Benzyl alcohol (CAS #:	35mg/L 3 h Anabaena variabilis	460 mg/L 96 h Pimephales	23 mg/L 48 h water flea
100-51-6)	mg/L	promelas static	230 mg/L 48h Daphnia magna
	mg/L 72h Pseudokirchnerella	10 mg/L 96 h Lepomis	
	subcapitata	macrochirus static	
	mg/L 72h Pseudokirchnerella	770 mg/L 1h 24h 48h	
	subcapitata	Pimephales promelas	
		460 mg/L 72h 96h Pimephales	
		promelas	
Triethanolamine (CAS #:	216: 72 h Desmodesmus	10600 - 13000: 96 h	-
102-71-6)	subspicatus mg/L EC50 169: 96	Pimephales promelas mg/L	
	h Desmodesmus subspicatus	LC50 flow-through 1000: 96 h	
	mg/L EC50	Pimephales promelas mg/L	
		LC50 static 450 - 1000: 96 h	
		Lepomis macrochirus mg/L	
		LC50 static	

## 12.2. Persistence and degradability

No information available.

## 12.3. Bioaccumulative potential

Chemical Name	Partition coefficient (LogPow)
2-Phenoxy Ethanol (CAS #: 122-99-6)	1.13
BX (CAS #: 147-14-8)	6.6
Benzyl alcohol (CAS #: 100-51-6)	1.1
Triethanolamine (CAS #: 102-71-6)	-2.53

Chemical Name	Bioconcentration factor (BCF)
BX (CAS #: 147-14-8)	11
Triethanolamine (CAS #: 102-71-6)	3.9

## 12.4. Mobility in soil

No information available.

## 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

## 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

## SECTION 14: Transport information

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group	Not regulated
14.5. Environmental hazards	Not regulated
14.6. Special precautions for user	No information available
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	Does not apply

## **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture European Union

Component	EINECS/ELINCS	SVHC candidates	RESTRICTIONS - REACH TITLE VIII
2-Phenoxy Ethanol 122-99-6 ( 25% )	X	-	-
BX 147-14-8(15%)	X	-	-
Benzyl alcohol 100-51-6(15%)	X	-	_

Triethanolamine 102-71-6 (4%)	Х	-	-
Phosphric acid ester	Х	-	-
90506-69-7 (1%)			

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

## International Inventories

Component	TSCA	DSL/NDSL	ENCS	IECSC	KECL	PICCS	AICS
2-Phenoxy Ethanol 122-99-6 ( 25% )	Х	X	Х	Х	Х	Х	Х
BX 147-14-8(15%)	Х	Х	Х	Х	Х	Х	Х
Benzyl alcohol 100-51-6(15%)	Х	X	Х	Х	Х	X	Х
1,2-propanediol 4254-14-2 (10%)	-	Х	Х	-	-	Х	-
Keton resin 25054-06-2(10%)	Х	Х	Х	Х	Х	Х	Х
Castor oil resin 66070-88-0 ( 5% )	Х	Х	Х	Х	Х	Х	Х
Triethanolamine 102-71-6 (4%)	Х	Х	Х	Х	Х	X	Х
Phosphric acid ester 90506-69-7 (1%)	-	-	-	Х	-	-	-

"-" Not Listed

"X" Listed

### 15.2. Chemical safety assessment

No information available.

## **SECTION 16: Other information**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Issue Date	26-Oct-2016
Revision date	26-Oct-2016
Revision Note	Not applicable

## Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average) STEL

- STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances **KECL** 

- Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical

Substances AICS - Australian Inventory of Chemical Substances

## Key literature references and sources for data

#### ECHA: http://echa.europa.eu/

IFA GESTIS: http://gestis-en.itrust.de/nxt/gateway.dll?f=templates\$fn=default.htm\$vid=gestiseng:sdbeng HSDB: http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

## Full text of H-Statements referred to under section 3

H319 - Causes serious eye irritation H302 - Harmful if swallowed H332 - Harmful if inhaled

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

----- End of Safety Data Sheet ------

Version 1

Product Name BALLPEN INKS BLACK

Issue Date 26-Oct-2016 Revision date 26-Oct-2016

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

# 1.1. Product identifier

Product NameBallpen inks blackREACH registration numberNo information available

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended UseBallpen inkUses advised againstNo information available

## 1.3. Details of the supplier of the safety data sheet

Supplier	Suzhou Xiongying Ink Technology Co., Ltd
Address	Yunli road NO539 economic development zone of wujiang city jiangsu province
	China
Postal Code	215217
Phone	+86-512-63331385
FAX	+86-512-63320778
E-mail	zhangshenghong001@126.com

Importer Address Postal Code Phone FAX E-mail

1.4. Emergency telephone number

+86-512-63331385

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eve damage/eve irritation Category 2 - (H319)

## 2.2. Label elements

Symbols/Pictograms

Signal word Hazard Statements Precautionary Statements Warning H319 - Causes serious eye irritation P264 - Wash face, hands and any exposed skin thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention

EU Specific Hazard Statements None.

## 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

#### 3.1 Mixture

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Solvent black 46	265-449-9	65113-55-5	30	Not classified
Benzyl alcohol	202-859-9	100-51-6	25	Acute Tox. 4 (H332) Eye Irrit. 2 (H319)
2-Phenoxy Ethanol	204-589-7	122-99-6	20	Eye Irrit. 2 (H319)
Keton resin	607-515-5	25054-06-2	14	Not classified
Epoxy resin	607-468-0	24969-06-0	6	Not classified
Triethanolamine	203-049-8	102-71-6	4	Not classified
Phosphric acid ester	291-933-4	90506-69-7	1	Not classified

## SECTION 4: First aid measures

#### 4.1. Description of first aid

#### measures General advice

Remove contaminated clothing and shoes. If symptoms persist, call a physician.

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

#### Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

#### Self-protection of the first aider

First aider: Pay attention to self-protection. Use personal protection recommended in Section 8.

#### **4.2. Most important symptoms and effects, both acute and delayed** No information available.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

# SECTION 5: Firefighting measures

# 5.1. Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. No information available.

#### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### 5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas.

#### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

#### 6.4. Reference to other sections

See Section 7 for more information See section 8 for more information See section 13 for more information

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drBallpen inks black or smoke when using this product. Wash thoroughly after handling. Use personal protection recommended in Section 8.

## 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep locked up and out of reach of children. Store in accordance with local regulations.

## 7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

2-Phenoxy Ethanol (CAS #:	-	Oldin			European Union
122-99-6)		Skin STEL 20 ppm STEL 110 mg/m <sup>3</sup> TWA: 20 ppm TWA: 110 mg/m <sup>3</sup> Ceiling 20 ppm Ceiling 110 mg/m <sup>3</sup>	-	-	-
Triethanolamine (CAS #: 102-71-6)	5 mg/m <sup>3</sup>	STEL 1.6 ppm STEL 10 mg/m <sup>3</sup> TWA: 0.8 ppm TWA: 5 mg/m <sup>3</sup>	-	TWA: 0.5 ppm TWA: 3.1 mg/m <sup>3</sup>	-
		·			

Benzyl alcohol (CAS #: 100-51-6)	TWA: 5 mg/m <sup>3</sup>	-	TWA: 10 ppm TWA: 45 mg/m <sup>3</sup>	-	-
2-Phenoxy Ethanol (CAS #: 122-99-6)		-	TWA: 20 ppm TWA: 110 mg/m <sup>3</sup> STEL: 50 ppm STEL: 290 mg/m <sup>3</sup> Skin	TWA: 20 ppm TWA: 110 mg/m <sup>3</sup> Ceiling / Peak: 40 ppm Ceiling / Peak: 220 mg/m <sup>3</sup> Skin	-
Triethanolamine (CAS #: 102-71-6)		-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> Ceiling / Peak: 20 mg/m <sup>3</sup>	-

Chemical Name	Poland	Portugal	Spain	Switzerland	Netherlands
Benzyl alcohol (CAS #: 100-51-6)	TWA: 240 mg/m <sup>3</sup>	-	-	-	-
2-Phenoxy Ethanol (CAS #: 122-99-6)	TWA: 230 mg/m <sup>3</sup>	-	-	Skin STEL: 40 ppm STEL: 220 mg/m <sup>3</sup> TWA: 20 ppm TWA: 110 mg/m <sup>3</sup>	-

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethanolamine (CAS #:	TWA: 5 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup>	-	-
102-71-6)	STEL: 10 mg/m <sup>3</sup>				

## Derived No Effect Level (DNEL)

No information available

## Predicted No Effect Concentration (PNEC)

No information available

## 8.2. Exposure controls

**Engineering Controls** 

Showers. Eyewash stations. Ventilation systems. Ensure adequate ventilation, especially in confined areas.

## Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand Protection	Wear protective gloves.
Skin and body protection	Suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	None under normal processing

## **Environmental exposure controls**

Avoid release to the environment.

# SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Color	black
Odor	No information available
Odor Threshold	Not determined
рН	Not determined
Melting point/freezing point	Not determined
Boiling point / boiling range	Not determined
Flash point	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Explosive limits	Not determined

Flammability Limit in Air Vapor Pressure Vapor density Relative density Partition coefficient (LogPow) Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties Oxidizing properties Not determined Not an explosive Not determined

**9.2. Other information** No information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No information available.

#### 10.2. Chemical stability

Stable under normal conditions.

#### **10.3. Possibility of hazardous reactions** None under normal processing.

## 10.4. Conditions to avoid

Heat, flames and sparks.

#### 10.5. Incompatible materials

None known based on information supplied.

## **10.6. Hazardous decomposition products**

None under normal use conditions.

## SECTION 11: Toxicological information

## 11.1. Information on toxicological

## effects Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Benzyl alcohol (CAS #:	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L 4h ( Rat )
100-51-6)	1.55 mL/kg bw(Rat) male	< 5000 mg/kg bw (Guinea pig)	> 4178 mg/m³air 4h(Rat)
	mL/kg bw (Rat)		
2-Phenoxy Ethanol (CAS #:	= 1260 mg/kg (Rat)	= 5 mL/kg (Rabbit)	-
122-99-6)		-	
Triethanolamine (CAS #:	= 4190 mg/kg (Rat)	> 16 mL/kg (Rat)	-
102-71-6)		> 20 mL/kg (Rabbit)	

## Skin corrosion/irritation

Non-irritating to the skin.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Sensitization

No sensitization responses were observed.

## Germ cell mutagenicity

No information available.

#### Carcinogenicity

Chemical Name	European Union	IARC
Triethanolamine (CAS #: 102-71-6)	-	Group 3

## Reproductive toxicity

No information available.

## STOT - single exposure

No information available.

## STOT - repeated exposure

No information available.

## Aspiration hazard

No information available.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Benzyl alcohol (CAS #:	35mg/L 3 h Anabaena variabilis	460 mg/L 96 h Pimephales	23 mg/L 48 h water flea
100-51-6)	mg/L	promelas static	230 mg/L 48h Daphnia magna
	mg/L 72h Pseudokirchnerella	10 mg/L 96 h Lepomis	
	subcapitata	macrochirus static	
	mg/L 72h Pseudokirchnerella	770 mg/L 1h 24h 48h	
	subcapitata	Pimephales promelas	
		460 mg/L 72h 96h Pimephales	
		promelas	
2-Phenoxy Ethanol (CAS #:	500: 72 h Desmodesmus	337 - 352: 96 h Pimephales	500: 48 h Daphnia magna mg/L
122-99-6)	subspicatus mg/L EC50	promelas mg/L LC50	EC50
	-	flow-through 366: 96 h	
		Pimephales promelas mg/L	
		LC50 static 220 - 460: 96 h	
		Leuciscus idus mg/L LC50 static	
Triethanolamine (CAS #:	216: 72 h Desmodesmus	10600 - 13000: 96 h	-
102-71-6)	subspicatus mg/L EC50 169: 96	Pimephales promelas mg/L	
	h Desmodesmus subspicatus	LC50 flow-through 1000: 96 h	
	mg/L EC50	Pimephales promelas mg/L	
	-	LC50 static 450 - 1000: 96 h	
		Lepomis macrochirus mg/L	
		LC50 static	

## 12.2. Persistence and degradability

No information available.

## 12.3. Bioaccumulative potential

Chemical Name	Partition coefficient (LogPow)
Benzyl alcohol (CAS #: 100-51-6)	1.1
2-Phenoxy Ethanol (CAS #: 122-99-6)	1.13
Triethanolamine (CAS #: 102-71-6)	-2.53

Chemical Name	Bioconcentration factor (BCF)
Triethanolamine (CAS #: 102-71-6)	3.9

## 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

## 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste from residues/unused<br/>productsDisposal should be in accordance with applicable regional, national and local laws<br/>and regulations.Contaminated packagingDisposal should be in accordance with applicable regional, national and local laws<br/>and regulations.

## SECTION 14: Transport information

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group	Not regulated
14.5. Environmental hazards	Not regulated
14.6. Special precautions for user	No information available
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	Does not apply

## SECTION 15: Regulatory information

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture European Union

Component	EINECS/ELINCS	SVHC candidates	RESTRICTIONS - REACH		
Solvent black 46 65113-55-5(30%)	X	-	-		
Benzyl alcohol 100-51-6(25%)	X	-	-		
2-Phenoxy Ethanol 122-99-6(20%)	X	-	-		
Triethanolamine 102-71-6(4%)	X	-	-		
Phosphric acid ester 90506-69-7 (1%)	X	-	-		

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

#### **International Inventories**

Component	TSCA	DSL/NDSL	ENCS	IECSC	KECL	PICCS	AICS
Solvent black 46	Х	Х	-	-	-	-	Х
65113-55-5 (30%)							

Benzyl alcohol 100-51-6 (25%)	Х	Х	Х	Х	Х	Х	Х
2-Phenoxy Ethanol 122-99-6 ( 20% )	Х	Х	Х	Х	Х	Х	Х
Keton resin 25054-06-2(14%)	х	Х	Х	Х	Х	Х	Х
Epoxy resin 24969-06-0 ( 6% )	Х	Х	Х	Х	Х	Х	Х
Triethanolamine 102-71-6 (4%)	Х	Х	Х	Х	Х	Х	Х
Phosphric acid ester 90506-69-7 (1%)	-	-	-	Х	-	-	-

"-" Not Listed

"X" Listed

## 15.2. Chemical safety assessment

No information available.

## **SECTION 16: Other information**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Issue Date	26-Oct-2016
Revision date	26-Oct-2016
Revision Note	Not applicable

### Key or legend to abbreviations and acronyms used in the safety data sheet

**TWA** - TWA (time-weighted average) **STEL** 

- STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances KECL

- Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical

Substances AICS - Australian Inventory of Chemical Substances

### Key literature references and sources for data

ECHA: http://echa.europa.eu/

IFA GESTIS: http://gestis-en.itrust.de/nxt/gateway.dll?f=templates\$fn=default.htm\$vid=gestiseng:sdbeng HSDB: http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

## Full text of H-Statements referred to under section 3

H319 - Causes serious eye irritation H302 - Harmful if swallowed H332 - Harmful if inhaled

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

----- End of Safety Data Sheet ------