


Product name : K-LON INK-ROLL BLUE

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF COMPANY UNDERTAKING

- 1.1 Product identifications**
Product name : K-Lon ink-roll blue
Internal code number : 054527/054539
- 1.2 Relevant identified use of the substance or the mixture and use that is advised against**
Main use category : Professional use
Industrial/ Professional use spec : Industrial. For professional use only
Identified use : Coding ink
Uses advised against : No additional information available
- 1.3 Details relating to the provider of the safety data sheet**
Company : B.V. Korthofah
Lageweg 39
2222AG Katwijk ZH
The Netherlands
Telephone : 0031 71 40 60 480
E-mail address : export@kortho.nl
- 1.4 Telephone number in case of emergencies**
Emergency telephone number : 111
Organisation/company : National Poisons Information Service (NHS Direct) – <http://www.npis.org>
(England, Wales and Northern Ireland - NHS 111 and Scotland - NHS 24)

2. HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
In compliance with EC regulation No. 1272/2008 and its amendments.
Eye irritation, Category 2 (Eye Irrit. 2, H319).
Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
- 2.2 Label elements**
According to Regulation (EC) No 1272/2008 [CLP]
- Hazard Pictogram** : 
- Signal Word** : Warning
- Hazard Statement(s)**
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
- Precautionary statement(s)**
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.
- 2.3 Other hazards**
The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>.
The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product name : K-LON INK-ROLL BLUE

3.2 Mixtures

Composition: <u>Component</u>	<u>Identifiers</u>	<u>Cont.%</u>	<u>Classification</u> <u>Regulation (EC) No</u> 1272/2008 [CLP]	<u>Note</u>
Polyvinyl chloride	CAS: 9002-86-2	25 <= x% < 50		[1]
Thiodiglycol	INDEX: 603-081-00-6 CAS: 111-48-8 EC: 203-874-3	2.5 <= x % < 10	GHS07 Wng Eye Irrit. 2, H319	
Benzyl alcohol	CAS: 100-51-6 EC: 202-859-9 REACH: 01-2119492630-38-XXXX	0 <= x % < 2.5	GHS07 Wng Acute Tox. 4, H302 Eye Irrit. 2, H319 Acute Tox. 4, H332	
Cellulose	CAS: 9004-34-6	0 <= x % < 2.5		[1]
C.I. basic blue 26	CAS: 2580-56-5 EC: 219-943-6	0 <= x % < 2.5	GHS07, GHS09 Wng Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1	
Triphenylphosphate	CAS: 115-86-6 EC: 204-112-2 REACH: 01-2119457432-41	0 <= x % < 2.5	GHS09 Wng Aquatic Chronic 2, H411 Aquatic Acute 1, H400 M Acute = 1	[1]

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

4. FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1 Description of first aid measures

In the event of splashes or contact with eyes:

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of swallowing:

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

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5. FIRE-FIGHTING MEASURES

Non-flammable.

5.1 Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2 Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- sulphur dioxide (SO₂)
- hydrogen chloride (HCl)

5.3 Advice for firefighters

No data available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under section 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2 Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3 Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4 Reference to other sections

No data available.

7. HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1 Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

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Fire prevention:

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture.

Packages which have been opened must be reclosed carefully and stored in a horizontal position.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2 Conditions for safe storage, including any incompatibilities

No data available.

Storage:

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

The rollers must be stored in the original packaging in, an horizontal position at a temperature between 10 and 40°C.

Packaging:

Always keep in packaging made of an identical material to the original.

7.3 Specific end use(s)

No data available.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits:

- China (GBZ 2.1, 2007):

CAS:	TWA:	STEL:	Anm:	TWA:	STEL:	Anm:
9002-86-2	5 mg/m3	-	-	-	-	-
9004-34-6	10 mg/m3	-	-	-	-	-

- France (INRS - ED984 :2012):

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
9004-34-6	-	10	-	-	-	-
115-86-6	-	3	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2007):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
9002-86-2	10 mg/m3	-	-	-	TI
9004-34-6	4 mg/m3	-	-	-	-
115-86-6	3 mg/m3	6 mg/m3	-	-	-

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

BENZYL ALCOHOL (CAS: 100-51-6)

Final use	: Workers.
Exposure method	: Dermal contact.
Potential health effects	: Long term systemic effects.
DNEL	: 9.5 mg/kg body weight/day.

Exposure method	: Dermal contact.
Potential health effects	: Short term systemic effects.
DNEL	: 47 mg/kg body weight/day.

Exposure method	: Inhalation.
Potential health effects	: Short term systemic effects.

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DNEL : 450 mg of substance/m3.

Exposure method : Inhalation.
Potential health effects : Long term systemic effects.
DNEL : 90 mg of substance/m3.

Final use : Consumers.

Exposure method : Ingestion.
Potential health effects : Long term systemic effects.
DNEL : 25 mg/kg body weight/day.

Exposure method : Ingestion.
Potential health effects : Short term systemic effects.
DNEL : 5 mg/kg body weight/day.

Exposure method : Dermal contact.
Potential health effects : Long term systemic effects.
DNEL : 28.5 mg/kg body weight/day.

Exposure method : Inhalation.
Potential health effects : Short term systemic effects.
DNEL : 95.5 mg of substance/m3.

Exposure method : Inhalation.
Potential health effects : Long term systemic effects.
DNEL : 19.1 mg of substance/m3.

Predicted no effect concentration (PNEC):

BENZYL ALCOHOL (CAS: 100-51-6)

Environmental compartment: Soil.
PNEC : 0.456 mg/kg.

Environmental compartment: Fresh water.
PNEC : 1 mg/l.

Environmental compartment: Sea water.
PNEC : 0.1 mg/l.

Environmental compartment: Intermittent waste water.
PNEC : 2.3 mg/l.

Environmental compartment: Fresh water sediment.
PNEC : 5.27 mg/kg.

Environmental compartment: Marine sediment.
PNEC : 0.527 mg/kg.

Environmental compartment: Waste water treatment plant.
PNEC : 39 mg/l

8.2 Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

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Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

Hand protection

Handle with gloves. Properly check gloves before use. Carefully remove gloves without touching the outside with your exposed hand. Immediately throw away used gloves in accordance with the valid laboratory regulations. Wash and dry your hands. The protective gloves must comply with the specifications of EU Directive 89/686/EEC and the standard EN 374, which has been derived from this. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

Glove material: Nitrile*

Thickness of material: $0.4 \pm 0.05\text{mm}$

Penetration time: 480 minutes

(* Tested glove Nitrile I – KCL 0730)

Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General information:

Physical state : Liquid (in foam)

Important health, safety and environmental information

pH : Not stated, neutral.

Boiling point/boiling range : Not specified.

Flash point interval : Flash point $>100^{\circ}\text{C}$.

Vapour pressure (50°C) : Below 110 kPa (1.10 bar).

Density : > 1

Water solubility : Insoluble.

Melting point/melting range : Not specified.

Self-ignition temperature : Not specified.

Decomposition point/decomposition range : Not specified.

9.2 Other information

VOC (g/l) : 0.00.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3 Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

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The thermal decomposition may release/form:

- carbon monoxide (CO).
- carbon dioxide (CO₂).
- sulphur dioxide (SO₂)
- hydrogen chloride (HCl).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage.

11.1.1 Substances

Acute toxicity:

TRIPHENYLPHOSPHATE (CAS: 115-86-6)

Oral route : LD50 = 3800 mg/kg
Species: Rat

Dermal route : LD50 = 7900 mg/kg
Species: Rabbit

C.I. BASIC BLUE 26 (CAS: 2580-56-5)

Oral route : LD50 > 900 mg/kg
Species: Rat

BENZYL ALCOHOL (CAS: 100-51-6)

Oral route : LD50 = 1230 mg/kg
Species: Rat

Inhalation route
(dust/mist) : LC50 = 4.178 mg/l

11.1.2 Mixture

No toxicological data available for the mixture.

12. ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

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12.1 Toxicity

12.1.1 Substances

C.I. BASIC BLUE 26 (CAS: 2580-56-5)

Fish toxicity : LC50 < 1 mg/l
Factor M = 1
Species: Leuciscus idus
Duration of exposure: 96 h

TRIPHENYLPHOSPHATE (CAS: 115-86-6)

Fish toxicity : LC50 = 0.4 mg/l
Species: Oncorhynchus mykiss
Duration of exposure: 96 h

Crustacean toxicity : EC50 = 0.18 mg/l
Species: Mysisopsis bahia
Duration of exposure: 96 h

BENZYL ALCOHOL (CAS: 100-51-6)

Fish toxicity : LC50 = 460 mg/l
Species: Pimephales promelas
Duration of exposure: 96 h

Crustacean toxicity : EC50 = 230 mg/l
Species: Daphnia magna
Duration of exposure: 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity : EC50 = 770 mg/l
Species: Pseudokirchnerella subcapitata
Duration of exposure: 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2 Mixtures

No aquatic toxicity data available for the mixture.

12.2 Persistence and degradability

12.2.1 Substances

TRIPHENYLPHOSPHATE (CAS: 115-86-6)

Biodegradability : Rapidly degradable.

C.I. BASIC BLUE 26 (CAS: 2580-56-5)

Biodegradability : No degradability data is available, the substance is considered as not degrading quickly.

BENZYL ALCOHOL (CAS: 100-51-6)

Biodegradability : No degradability data is available, the substance is considered as not degrading quickly.

12.3 Bioaccumulative potential

TRIPHENYLPHOSPHATE (CAS: 115-86-6)

Octanol/water partition coefficient : log K_{ow} = 4.63
Bioaccumulation : BCF = 190

BENZYL ALCOHOL (CAS: 100-51-6)

Octanol/water partition coefficient : log K_{ow} = 1.05

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

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12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1 Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

14. TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1 UN number

-

14.2 Proper shipping name from the UN Model Regulations

-

14.3 Transport hazard class(es)

-

14.4 Packaging group

-

14.5 Environmental hazards

-

14.6 Special precautions for the user

-

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

Container information:

No data available.

Particular provisions:

No data available.

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Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704):

NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16. OTHER INFORMATION

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and amending Regulation (EC) No 1907/2006.

Other information

None.

Full text of H statements to which reference is made in sections 2 and 3

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] to which reference is made in sections 2 and 3

Acute Tox. 4	Acute Toxicity - Category 4
Aquatic Acute 1	Aquatic Acute - Category 1
Aquatic Chronic 1	Aquatic Chronic - Category 1
Aquatic Chronic 2	Aquatic Chronic - Category 2
Aquatic Chronic 3	Aquatic Chronic - Category 3
Eye Irrit. 2	Eye irritation - Category 2

Abbreviations:

ADR	European agreement concerning the international carriage of dangerous goods by Road.
CAS	Chemical Abstracts Service (division of the American Chemical Society).
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008].
DNEL	Derived No Effect Level.
IMDG	International Maritime Dangerous Goods.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organisation.
RID	Regulations concerning the International carriage of Dangerous goods by rail.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organisation.
IMDG	International Maritime Dangerous Goods code: International code for the transportation of hazardous substances at sea.
PBT	Persistent, bioaccumulating and toxic.
PNEC	Predicted No-Effect Concentration.
REACH	Registration, Evaluation and Authorisation of Chemicals.

RID	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations for the transportation of hazardous substances by train).
SVHC	Substance of very high concern
vPvB	Very Persistent and very Bioaccumulative.

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WGK Wassergefährdungsklassen (water hazard class).

Revision

This SDS replaced the previous release with revision 5.1/20092016. Modifications made are marked with #.

More detailed information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions.

It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

While the information is believed to be reliable, we do not guarantee its accuracy. Purchasers are encouraged to make their own tests with materials described herein and must make independent determination of suitability and completeness of information from all sources to assure proper use with materials and compatibility with equipment.

The above information is assumed to be correct but does not make any claim of completeness and should only be used as a guideline. Korthofah BV is not liable for any eventual damage arising out of the handling of or contact with the aforementioned product.

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