

Product description: KORTHO INK GJ6 BLACK, 4X 100CM3

1. IDENTIFICATION OF THE SUBSTANCE OR THE MIXTURE AND OF THE COMPANY/BUSINESS

1.1 Product identifications

Product name : Kortho Ink GJ6 black, 4x100 cm3
Internal code number : 083927
Product description : Printing ink

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 : Inkjet printing 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 the mixture

Product definition : mixture

Classification in accordance with directive (EC) No. 1272/2008

Eye Irrit. 2A H319

For the full text on H statements as set out in this section, see section 16.

Adverse physicochemical, human health and environmental effects

No additional information available.

2.2 Labelling elements

According to Regulation (EC) No 1272/2008 [CLP]

Hazard Pictogram



Signal Word

: Warning

Hazard Statement(s)

H319 Causes serious eye irritation

Precautionary statements

P264 Wash all exposed external body areas thoroughly after handling.
P280 Wear eye protection, face protection, protective clothing, protective gloves.
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

No additional information available

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

<u>Component</u>	<u>Identifiers</u>	<u>Cont.%</u>	<u>Classification Regulation (EC) No 1272/2008 [CLP]</u>
Butyl lactate	CAS: 138-22-7 EC: 205-316-4	50-90%	Eye Irrit. 2, H319
Dipotium oxide	CAS: 7732-18-5 EC: 231-791-2	0-8%	Not classified
Soybean oil	CAS: 8001-22-7 EC: 232-274-4	0-6%	Not classified

See section 16 for the full text of the H statements declared above.

4. FIRST AID MEASURES

4.1 Description of first aid measures

- General advice** : Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.
- In case of inhalation** : Allow victim to breathe fresh air. Allow the victim to rest.
- In case of skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- In case of eye contact** : 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.
- In case of ingestion** : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms/injuries** : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/injuries after eye contact** : Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No additional information available.

5. FIRE FIGHTING MEASURES

5.1 Fire extinguishers

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media** : Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

No additional information available.

5.3 Advice for fire-fighters

- Fire-fighting instructions** : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during fire-fighting** : Do not enter fire area without proper protective equipment, including respiratory protection.

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6. MEASURES IN THE EVENT OF THE ACCIDENTAL RELEASE OF THE SUBSTANCE OR PREPARATION

6.1 Personal precautions, protective equipment and emergency procedures

For non emergency personnel

Emergency procedures : Evacuate unnecessary personnel

For emergency responders

Protective equipment : Equip clean-up crew with proper protection.

Emergency procedures : Ventilate area.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Containment and cleaning methods and materials

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4 Reference to other sections

See section 8. Exposure controls and personal protection.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling of the substance or mixture

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures

Wash Skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, Heat and ignition sources.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3 Specific end use(s)

No additional information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Butyl lactate (138-22-7)

Belgium	Limit value (mg/m ³)	30 mg/m ³
Belgium	Limit value (ppm)	5 ppm
France	VME (mg/m ³)	25 mg/m ³
France	VME (ppm)	5 ppm
Greece	OEL TWA (mg/m ³)	25 mg/m ³
Greece	OEL TWA (ppm)	5 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	5 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	5 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	URT irr
Spain	VLA-ED (mg/m ³)	30 mg/m ³
Spain	VLA-ED (ppm)	5 ppm
Switzerland	VME (mg/m ³)	30 mg/m ³
Switzerland	VME (ppm)	5 ppm

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United Kingdom	WEL TWA (mg/m ³)	30 mg/m ³
United Kingdom	WEL TWA (ppm)	5 ppm
Denmark	Grænseværdie (langvarig) (mg/m ³)	30 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	5 ppm
Finland	HTP-arvo (8h) (mg/m ³)	30 mg/m ³
Finland	HTP-arvo (8h) (ppm)	5 ppm
Finland	HTP-arvo (15 min)	61 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	10 ppm
Ireland	OEL (8 hours ref) (mg/m ³)	25 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	5 ppm
Lithuania	IPRV (mg/m ³)	30 mg/m ³
Lithuania	IPRV (ppm)	5 ppm
Lithuania	TPRV (mg/m ³)	60 mg/m ³
Lithuania	TPRV (ppm)	10 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	25 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	5 ppm
Sweden	nivågränsvärde (NVG) (mg/m ³)	30 mg/m ³
Sweden	nivågränsvärde (NVG) (ppm)	5 ppm
Sweden	kortidsvärde (KTV) (mg/m ³)	60 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	10 ppm
Australia	TWA (mg/m ³)	30 mg/m ³
Australia	TWA (ppm)	5 ppm
Portugal	OEL TWA (ppm)	5 ppm

Soybean oil (8001-22-7)

Belgium	Limit value (mg/m ³)	10 mg/m ³
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8.2 Measures to control exposure

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Do not eat, drink or smoke during use.

Eye/face protection

: Face protection and safety goggles. Use face and/or eye protection tested and approved by official organisations such as NIOSH (US) or EN166 (EU).

Skin protection

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 ± 0.05mm
Penetration time: 480 minutes
(* Tested glove Nitrile I – KCL 0730)

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Body protection	: Impenetrable clothing, flame-retardant, anti-static protective clothing. The type of protective features depends on the concentration and quantity of hazardous substances in the workplace in question. Material: Kleenguard Type: T7 LAB (jacket) – T6 5ultra (suit) Characteristics: EN1149-1 antistatic, non-heat retaining, protective clothing to prevent incendiary discharge. Clothing with a limited service life, which provides protection against chemicals and protects certain parts of the body: <ul style="list-style-type: none">- immediately throw clothing away after use;- immediately throw damaged clothing away;- strictly observe the operating instructions, which is supplied with the clothing. <p>Should unexpected contamination of the clothing worn under the protective clothing occur, then it should immediately be taken off and thrown away.</p>
Respiratory protection	: Whenever there are breathing risks, where necessary use a full-face respirator combined with (US) and/or type ABEK (EN 14387) breathing pattern as a support when undertaking a factory inspection. If the face mask is the only means of protection, use a full-face respirator (oxygen mask). Use respirators tested and approved by official government bodies such as NIOSH (US) or CEN (EU).
Other information	: Do not eat, drink or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information about physical and chemical basic properties**

Physical state	: Liquid.
Colour	: Black.
Odour	: Mild. Distinctive.
Odour threshold	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: 154 - 187 °C.
Flash point	: 69 °C.
pH	: No data available.
Relative evaporation rate (butylacetate = 1)	: No data available.
Vapour pressure	: No data available.
Relative density	: No data available.
Density	: No data available.
Relative vapour density at 20°C	: No data available.
Solubility(ies)	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Non flammable.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

9.2 Other safety information

No additional information available.

10. STABILITY AND REACTIVITY**10.1 Reactivity**

No additional information available.

10.2 Chemical stability

Not established.

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- 10.3 Potential hazardous reactions**
Not established.
- 10.4 Conditions to be avoided**
Direct sunlight. Extremely high or low temperatures.
- 10.5 Incompatible materials**
Strong acids, Strong bases.
- 10.6 Hazardous decomposition products**
Fume. Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information about toxicological effects

Acute toxicity : Not classified. Based on available data, the classification criteria are not met.

Butyl lactate (138-22-7)

LD50 oral rat > 5000 mg/kg (Rat)
LD50 dermal rabbit > 5000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l) > 5,1 mg/l/4h (Rat)

Skin corrosion/irritation : Not classified. Based on available data, the classification criteria are not met.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified. Based on available data, the classification criteria are not met.

Germ cell mutagenicity : Not classified. Based on available data, the classification criteria are not met.

Carcinogenicity : Not classified. Based on available data, the classification criteria are not met.

Reproductive toxicity : Not classified. Based on available data, the classification criteria are not met..

Specific target organ toxicity (single exposure) : Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) : Not classified. Based on available data, the classification criteria are not met.

Aspiration hazard : Not classified. Based on available data, the classification criteria are not met.

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No additional information available

Ink GJ6

Persistence and degradability : Not established.

Butyl lactate (138-22-7)

Persistence and degradability : Biodegradability in water: no data available.
ThOD : 1,97 g O₂/g substance soybean oil (8001-22-7)
Persistence and degradability : Not readily biodegradable in water. No (test)data available on mobility of the substance.
BOD (% of ThOD) : 0,39 % ThOD

Dipotium oxide (7732-18-5 .)

Persistence and degradability : Not established.

12.2 Persistence and degradability

Ink GJ6

Persistence and degradability : Not established.

Butyl lactate (138-22-7)

Persistence and degradability : Biodegradability in water: no data available.
ThOD : 1,97 g O₂/g substance soybean oil (8001-22-7)
Persistence and degradability : Not readily biodegradable in water. No (test)data available on mobility of the substance.
BOD (% of ThOD) : 0,39 % ThOD

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Diprotium oxide (7732-18-5 .)

Persistence and degradability : Not established.

12.3 Bioaccumulation

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Bioaccumulative potential : Not established.

Butyl lactate (138-22-7)

Log Pow : 1,1

Bioaccumulative potential : Low bioaccumulation potential (Log Kow < 4).

Soybean oil (8001-22-7)

Bioaccumulative potential : Not bioaccumulative.

Diprotium oxide (7732-18-5 .)

Bioaccumulative potential : Not applicable.

12.4 Mobility in soil

Soybean oil (8001-22-7)

Surface tension : 0,025 N/m (20 °C)

12.5 Results of PBT and vPvB assessment

No additional information available.

12.6 Other adverse effects

No additional information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment Methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a licensed waste centre in accordance with local/regional/national/international regulations.

Ecology – waste materials

: Avoid release to the environment.

European List of Waste (LoW) code

: 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

14. INFORMATION RELATING TO TRANSPORTATION

In accordance with ADR / RID / IMDG / IATA / AND.

14.1 UN number

Not dangerous goods in terms of transport regulations.

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Other information

: No supplementary information available.

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14.6 Special precautions for user

Overland transport : No additional information available.
Transport by sea : No additional information available.
Air transport : No additional information available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15. REGULATIONS

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008. Ink GJ6

3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 Ink GJ6

Contains no substance on the REACH candidate list.

Contains no REACH Annex XIV substances.

National regulations

Water hazard class (WGK) : 3 - severe hazard to waters

WGK remark : Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, 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

H319 Causes serious eye irritation.

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

Eye Irrit. 2 Serious eye damage/eye irritation Category 2.

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List of abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE	Acute Toxicity Estimate.
BOD	Biochemical oxygen demand.
CAS	Chemical Abstracts Service (division of the American Chemical Society).
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008].
COD	Chemical oxygen demand.
DNEL	Derived No Effect Level.
EINECS	European Inventory of Existing Commercial Chemical Substances.
EUH	
Statement	CLP-specific Hazard statement.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
IATA	International Air Transport Association.
IMDG	International Maritime Dangerous Goods code: International code for the transportation of hazardous substances at sea.
NVIC	Nationaal Vergiftigingen Informatie Centrum [National Poisons Information Centre].
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).
RRN	REACH Registration Number.
STOT SE	Specific target organ toxicity – single exposure.
ThOD	Theoretical oxygen demand.
vPvB	Very Persistent and very Bioaccumulative.
VwVws	Verwaltungsvorschrift wassergefährdender Stoffe.
WGK	Wassergefährdungsklassen (Water hazard class).

Revision

This SDS replaced the previous release with revision 1.1/24122014. 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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