

SAFETY DATA SHEET

Wolke
Ink
WLK660068A



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Version	: UK ENGLISH
Version number	: 1
Date of issue/ Date of revision	: 9/27/2018
Date of previous issue	: No previous validation ()

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

1.1 Product identifier

Product name : WLK660068A
Product code : Product code: WLK660068A-25, WLK660068A-84

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

Material uses : Industrial applications: Ink for use in high resolution drop-on-demand printing processes.

1.3 Details of the supplier of the safety data sheet

Website: www.wolke.com
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Videojet Technologies U.K.,Ltd., 4 & 5 Ermine Centre Lancaster Way, Huntingdon, Cambs, PE29 6XX, United Kingdom
Tel: 0870 240 5542 Fax: 0870 242 2835

1.4 Emergency telephone number

Medical ☎ 3E: +44 8 08 189 0979
3E Code: 334466

Transporters ☎ 3E: +44 8 08 189 0979
3E Code: 334466

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Sens. 1, H317	May cause an allergic skin reaction.
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Ingredients of unknown toxicity : 9.9 percent of the mixture consists of component(s) of unknown toxicity

Ingredients of unknown ecotoxicity : Contains 9.9 % of components with unknown hazards to the aquatic environment

2.2 Label elements



Warning. May cause an allergic skin reaction.

Hazardous ingredients : C.I. Reactive Black 31 (CAS 12731-63-4); Alcohols, C11-15-secondary, ethoxylated (CAS 68131-40-8).

2.3 Other hazards

Other hazards which do not result in classification : None.

Additional guidance : Avoid breathing vapour. Wear protective gloves. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash before reuse.

SECTION 3: Composition/information on ingredients

3.1 Substances : Not applicable.

3.2 Mixtures

Product/ingredient name	Identifiers	%	Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
1) DL-hexane-1,2-diol	REACH #: 01-2119987321-35 EC: 230-029-6 CAS: 6920-22-5	5 - <10	Eye Irrit. 2, H319	[1]
2) C.I. Reactive Black 31	CAS: 12731-63-4	3 - <7	Skin Sens. 1B, H317	[1]
3) Alcohols, C11-15-secondary, ethoxylated	REACH #: 01-2119560577-29 CAS: 68131-40-8	<1	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]

Type

[1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern
 Occupational exposure limits, if available, are listed in Section 8.
 See Section 16 for the full text of the H statements declared above.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
irritation
redness
Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
1) DL-hexane-1,2-diol	DNEL	Long term Inhalation	123 mg/m³	Workers	Systemic
2)	DNEL	Long term Dermal	17.5 mg/kg bw/day	Workers	Systemic
3) Alcohols, C11-15-secondary, ethoxylated	DNEL	Long term Inhalation	42.32 mg/m³	Workers	Systemic
4)	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
1) Alcohols, C11-15-secondary, ethoxylated	Fresh water	20 µg/l	Assessment Factors

8.2 Exposure controls

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

- Hand protection** : Recommended: EN374 K
May be used (Short term exposure): Latex gloves. Nitrile gloves. Use gloves only once. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. In situations where misting or flying may occur, use appropriate certified respirators. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Black.
- Odour** : Not available.
- Odour threshold** : Not available.
- pH** : 8
- Melting point/freezing point** : May start to solidify at the following temperature: 2 °C. Weighted average: 0 °C.
- Initial boiling point and boiling range** : Lowest known value: 100 °C. Weighted average: 111 °C.
- Flash point** : Not applicable.
- Evaporation rate** : 0.4
- Flammability (solid, gas)** : Not applicable. (Liquid)
- Upper/lower flammability or explosive limits** : Not applicable.
- Vapour pressure** : Highest known value: 23 mm Hg at 20°C. Weighted average: 21 mm Hg at 20°C.
- Vapour density** : <0.6 (Air = 1)
- Relative density** : 1
- Solubility(ies)** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Thermally stable.
- Viscosity** : Not available.
- Explosive properties** : Not applicable. Not classified.
- Oxidising properties** : Not applicable. Not classified.

9.2 Other information

- Volatility (w/w)** : 84 %.
- VOC Volatility (w/w)** : 8 %.

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

No specific data.

10.5 Incompatible materials

No specific data.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Alcohols, C11-15-secondary, ethoxylated	LDLo Dermal	Rat - Male, Female	>2000 mg/kg	-
	LDLo Oral	Rat - Female	>2000 mg/kg	-

Conclusion/Summary : Not classified. No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin : Not classified. No known significant effects or critical hazards.

Eyes : Not classified. No known significant effects or critical hazards.

Respiratory : Not classified. No known significant effects or critical hazards.

Sensitisation

Conclusion/Summary

Skin : May cause an allergic skin reaction.

Respiratory : Not classified. No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary : Not classified. No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : Not classified. No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary : Not classified. No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

Not available.

Conclusion/Summary : Not classified. No known significant effects or critical hazards.

Potential chronic health effects, Other

Conclusion/Summary : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Alcohols, C11-15-secondary, ethoxylated	EC50 4.01 mg/l	Daphnia	48 hours
	EC50 3.4 to 4.9 mg/l	Fish	96 hours
	Acute EC50 2.01 mg/l Fresh water	Algae - Pseudokirchnerella subcapitata	72 hours
	Chronic NOEC 0.305 mg/l Fresh water	Algae - Pseudokirchnerella subcapitata	72 hours

12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
DL-hexane-1,2-diol	-	-	Readily
Alcohols, C11-15-secondary, ethoxylated	-	-	Readily

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Alcohols, C11-15-secondary, ethoxylated	5.9	-	high

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : None.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

14.6 Special precautions for user

No special measures required.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

EU Regulation (EC) No. 98/2013 (Explosives Precursors) : Not applicable.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

15.3 Other information

8443.99 Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof: Other: EU ...90.00 Other.
USA ...20.10

Total concentration: Pb, Hg, Cd, Cr(VI) < 100 ppm

Chemical Weapons Convention List Schedule I Chemicals	Chemical Weapons Convention List Schedule II Chemicals	Chemical Weapons Convention List Schedule III Chemicals
Not listed	Not listed	Listed

SECTION 16: Other information

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

- : ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Sens. 1, H317	Calculation method

Full text of abbreviated H statements

H317 H319 H411	May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS]

Aquatic Chronic 2, H411 Eye Irrit. 2, H319 Skin Sens. 1, H317 Skin Sens. 1B, H317	LONG-TERM AQUATIC HAZARD - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1B
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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Exposure Scenarios

<http://www.videojet.com/usa/materialsafetydatasheets>