

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 as amended

SDS # : K-12000

Ink, UV Curable - Black

Issuing Date 2016-08-30

Revision Date 2019-02-28

Version 5

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

1.1 Product Identifier

Product Name Ink, UV Curable for Xerox Direct-to-Object InkJet Printer
Part no. 008R08070

Colour Black

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

Recommended Use Ink jet printing

1.3 Details of the supplier of the safety data sheet

Supplier Xerox Ltd.
 Xerox Environment, Health, Safety & Sustainability
 Monroe House
 Works Road
 Letchworth
 Herts. SG61LN
 UK

For further information, please contact

Contact person Manager, Environment, Health, Safety & Sustainability
Phone ++44 (0)1707 353434
Fax -
E-mail address ehs-europe@xerox.com

For the most current document <https://safetysheets.business.xerox.com>

1.4 Emergency telephone number

+44 1865 407333

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The product is classified and labelled in accordance with Regulation (EC) No. 1272/2008

Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin Sensitisation	Category 1
Reproductive toxicity	Category 2
Specific target organ toxicity (STOT) — single exposure	Category 3
Specific target organ toxicity (STOT) — repeated exposure	Category 1
Acute Aquatic Toxicity	Category 2
Chronic Aquatic Toxicity	Category 2

2.2 Label elements

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Symbol(s)



Signal Word

Danger

Hazard Statements

H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H317 - May cause an allergic skin reaction
 H335 - May cause respiratory irritation
 H361 - Suspected of damaging fertility or the unborn child
 H373 - May cause damage to organs through prolonged or repeated exposure
 H401 - Toxic to aquatic life
 H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

P260 - Do not breathe dust/fume/gas/mist/vapours/spray
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P264 - Wash hands thoroughly after handling
 P308 + P313 - IF exposed or concerned: Get medical advice/attention
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P362 - Take off contaminated clothing and wash before reuse
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P405 - Store locked up
 P273 - Avoid release to the environment
 P501 - Dispose of contents/container to an appropriate disposal facility in accordance with all local, regional, national, and international regulations

2.3 Other hazards

None

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Chemical Name	Weight %	CAS No.	EC-No	Classification (Reg. 1272/2008)	Hazard Statements	REACH Registration Number
Acrylate monomer	20-40	84100-23-2	282-104-8	Skin Irrit 2 Eye Irrit 2 Skin Sens 1 STOT SE3 Aquatic Chronic 2	H315 H319 H317 H335 H411	--
Acrylate monomer	10-20	5888-33-5	227-561-6	Skin Irrit 2 Eye Irrit 2 Skin Sens 1 Aquatic Acute 1 Aquatic Chronic 1	H315 H319 H317 H400 H410	--
Acrylate monomer	1-10	48145-04-6	256-360-6	Skin Sens 1A Aquatic Chronic 2	H317 H411	--
Acrylate monomer	1-10	63225-53-6	264-036-0	Skin Irrit 2 Eye Irrit 2 STOT SE3	H315 H319 H335	--
Acrylate monomer	1-10	2235-00-9	218-787-6	Acute Oral Tox 4 Acute Dermal Tox 4 Eye Irrit 2 Skin Sens 1 STOT RE 1(inhalation, liver)	H302 H312 H319 H317 H372	--
Photoinitiator	1-10	75980-60-8	278-355-8	Skin Sens 1B Repr 2 Aquatic Acute 2 Aquatic Chronic 2	H317 H361 H401 H411	--
Acrylate monomer	<5	66492-51-1	266-380-7	Skin Irrit. 2 Eye Irrit. 2 Skin Sens. 1B Aquatic Acute 3	H315 H319 H317 H402	--
Carbon black	1-5	1333-86-4	215-609-9	--	--	01-2119384822-32-0065
Acrylate monomer	<5	13048-33-4	235-921-9	Skin Irrit. 2 Eye Irrit 2 Skin Sens 1	H315 H319 H317	--
Inhibitor	<5	15625-89-5	239-701-3	Skin Irrit. 2 Eye Irrit 2 Skin Sens 1	H315 H319 H317	--
Mequinol	0.1-<3.0	150-76-5	205-769-8	Acute Oral Tox 4 Eye Irrit 2 Skin Sens 1 Repr. 2 Aquatic Acute 3	H302 H319 H317 H361 H402	--
Inhibitor	<5	52408-84-1	500-114-5	Eye Irrit 2 Skin Sens 1	H319 H317	--

Full text of H- statements: see section 16

Note

"--" indicates no classification or hazard statements apply.

Where no REACH registration number is listed, it is considered confidential to the Only Representative.

4. FIRST AID MEASURES

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4.1 Description of first aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes, If eye irritation persists, consult a specialist
Skin contact	Wash off with warm water and soap, Get medical attention if irritation develops and persists, Remove and wash contaminated clothing before re-use
Inhalation	Move to fresh air, Get medical attention immediately if symptoms occur
Ingestion	Clean mouth with water and afterwards drink plenty of water

4.2 Most important symptoms and effects, both acute and delayed

Acute toxicity	
Eyes	Irritating to eyes
Skin	Irritating to skin
Inhalation	May cause irritation of respiratory tract
Ingestion	No known effect
Chronic effects	
Chronic toxicity	Repeated or prolonged skin contact with the unexposed coating may cause skin irritation and/or dermatitis and sensitisation of susceptible persons, Repeated or prolonged exposure may cause adverse liver effects, May impair fertility
Main symptoms	Overexposure may cause: Prolonged contact may produce skin, eye and respiratory tract irritation.

4.3 Indication of immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically, May cause sensitisation by skin contact
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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Water spray, Foam, Carbon dioxide (CO ₂), Dry powder
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products Heating or fire conditions liberates toxic gas, Thermal decomposition can lead to release of irritating gases and vapours

None in particular

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Other information

Flash point	94 °C (closed cup)
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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin and the eyes, Use personal protective equipment

6.2 Environmental precautions

Should not be released into the environment, Do not allow material to contaminate ground water system

6.3 Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so, Prevent entry into waterways, sewers, basements or confined areas
Methods for cleaning up	Soak up with inert absorbent material, Pick up and transfer to properly labelled containers, Clean contaminated surface thoroughly

6.4 Reference to other sections

Do not dispose of waste into sewer
See Section 13 for additional information

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice, Avoid contact with skin and eyes, Ensure adequate ventilation, Handle and open container with care

Further information Wear PPE as described in Section 8

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place, Keep out of the reach of children, Handle with care, Keep cool and protect from sunlight

7.3 Specific end uses

Ink jet printing

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits For country specific exposure limits see Section 16

Chemical Name	ACGIH TLV	European Union
Carbon black	TWA: 3 mg/m ³	
Mequinol	TWA: 5 mg/m ³	

8.2 Exposure controls

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Engineering measures Ensure adequate ventilation, especially in confined areas

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection	Avoid contact with eyes, If splashes are likely to occur, wear:, Goggles
Hand protection	Protective gloves.
Skin and body protection	Avoid any skin contact Wear appropriate clothing to prevent repeated or prolonged skin contact
Respiratory protection	Use only with adequate ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Opaque	Odour	Slight acrylic
Physical state	Liquid	Colour	Black
pH	No information available		
Flash point	94 °C (closed cup)		
Boiling point/boiling range	No information available		
Softening point	Not applicable		
Evaporation rate	No information available		
Flammability Limits in Air	No information available		
Explosive Limits	No data available		
Vapour pressure	No information available		
Vapour density	No information available		
Specific gravity	No information available		
Water solubility	Negligible (acrylate mixture)		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	Not determined		
Viscosity	No information available		
Explosive properties	Not explosive		
Oxidising properties	Not applicable		

9.2 Other information

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

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Stable under normal conditions

10.3 Possibility of hazardous reactions

Hazardous reactions	None under normal processing
Hazardous polymerisation	Polymerisation can occur

10.4 Conditions to avoid

Strong oxidising agents, Extremes of temperature and direct sunlight

10.5 Incompatible Materials

Alkali metals, Strong oxidising agents, Peroxides, Inert Gases, Reducing agents, Free radical initiators

10.6 Hazardous decomposition products

Undefined, but may include toxic oxides of carbon and nitrogen, Acrylates

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product Information No product level data available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Acrylate monomer	4890 mg/kg (Rat)	5 g/kg (Rabbit)	
Acrylate monomer	4660 µL/kg (Rat)	2540 µL/kg (Rabbit)	
Carbon black	15400 mg/kg (Rat)	3 g/kg (Rabbit)	
Acrylate monomer	5 g/kg (Rat)	3600 µL/kg (Rabbit)	
Inhibitor	5190 µL/kg (Rat)	5000 mg/kg (Rabbit)	
Mequinol	1600 mg/kg (Rat)	2000 mg/kg (Rabbit)	

Chronic toxicity

Carcinogenicity

This product contains one or more substances which are classified by IARC as potential carcinogenic to humans. However, under normal use conditions there is no human exposure to these substances.

See "Other Information" in this section.

Chemical Name	IARC	NTP
Carbon black	2B	

Other information

The IARC (International Agency for Research on Cancer) has listed carbon black as "possibly carcinogenic to humans". The classification is based on studies evaluating pure, "free" carbon black. In the process of making this product, the small amount of carbon black is dispersed in a liquid and is not expressed as "free" carbon black. Therefore, this classification does not apply to this product.

Other toxic effects

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Sensitisation	May cause sensitisation of susceptible persons.
Reproductive toxicity	Contains a known or suspected reproductive toxin Possible risk of impaired fertility
Target organ effects	Liver
Other adverse effects	Respiratory tract irritation
Aspiration Hazard	No information available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Acute Aquatic Toxicity	Toxic to aquatic life
Chronic Aquatic Toxicity	Toxic to aquatic life with long lasting effects

12.2 Persistence and degradability

No product level data available

12.3 Bioaccumulative potential

No product level data available

12.4 Mobility in soil

No product level data available

12.5 Results of PBT and vPvB assessment

Not a PBT according to REACH Annex XIII

12.6 Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal considerations

Waste Disposal Method	This material and its container must be disposed of as hazardous waste
Waste from Residues/Unused Products	Use recommendations found in Section 7 when handling unused or uncured material Wear PPE as described in Section 8
Contaminated packaging	Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EWC Waste Disposal No.	08 03 12*

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14. TRANSPORT INFORMATION

14.1 UN/ID No

UN3082

14.2 Proper shipping name

Environmentally hazardous substance, liquid, n.o.s (isobornyl acrylate)

14.3 Transport hazard class(es)

9

14.4 Packing Group

III

14.5 Environmental hazards

Marine pollutant

14.6 Special precautions for users

Regulation specific information below

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

Not applicable

Regulation	UN/ID No	Proper shipping name	Hazard class	Subsidiary hazard class	Packing Group	Exceptions
ICAO/IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s (isobornyl acrylate)	9	-	III	Section 2.6 Dangerous Goods in Excepted Quantities
IMDG/IMO	UN3082	Environmentally hazardous substance, liquid, n.o.s (isobornyl acrylate)	9	-	III	Chapter 3.4 - Dangerous Goods Packed in Limited Quantities Chapter 3.5 - Dangerous Goods in Excepted Quantities
ADR/RID	UN3082	Environmentally hazardous substance, liquid, n.o.s (isobornyl acrylate)	9	-	III	
ADN	UN3082	Environmentally hazardous substance, liquid, n.o.s (isobornyl acrylate)	9	-	III	

15. REGULATORY INFORMATION

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

The product is classified and labelled in accordance with Regulation (EC) No. 1272/2008

15.2 Chemical Safety Assessment

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A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

16. OTHER INFORMATION

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Revision Note (M)SDS sections updated, 3

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed
 H312 - Harmful in contact with skin
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H361 - Suspected of damaging fertility or the unborn child
 H372 - Causes damage to organs through prolonged or repeated exposure
 H400 - Very toxic to aquatic life
 H401 - Toxic to aquatic life
 H402 - Harmful to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects
 H411 - Toxic to aquatic life with long lasting effects

Additional advice

EU Country Specific Exposure Limits

Chemical Name	The United Kingdom	Ireland	France	Germany	The Netherlands
Carbon black	STEL 7 mg/m ³ TWA 3.5 mg/m ³	TWA 3 mg/m ³ STEL 15 mg/m ³	TWA 3.5 mg/m ³		
Mequinol		TWA 5 mg/m ³ STEL 15 mg/m ³	TWA 5 mg/m ³		

Chemical Name	Belgium	Switzerland	Austria	Hungary	Czech Republic
4-(1,1-Dimethylethyl)cyclohexyl acrylate		S+			
2-Propenoic acid, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-		S+			
2-Propenoic acid, 2-phenoxyethyl ester		S+			
2-Propenoic acid, 2-[[[(butylamino)carbonyl]oxy]ethyl ester		S+			
2-Propenoic acid, (5-ethyl-1,3-dioxan-5-yl)methyl ester		S+			
Carbon black	TWA 3.5 mg/m ³				TWA 2.0 mg/m ³
1,6-Hexanediol diacrylate		S+			
Trimethylolpropane triacrylate		S+			
Mequinol	TWA 5 mg/m ³		STEL 10 mg/m ³		

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Chemical Name	Belgium	Switzerland	Austria	Hungary	Czech Republic
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.,.alpha.-1,2,3-propanetriyltris[.omega.-(1-oxo-2-propenyl)oxy]-		S+	TWA 5 mg/m ³		

Chemical Name	Spain	Portugal	Italy	Greece	Romania
Carbon black	TWA 3.5 mg/m ³	TWA 3.5 mg/m ³ C(A4)		TWA 3.5 mg/m ³ STEL 7 mg/m ³	
Mequinol	TWA 5 mg/m ³ S+	TWA 5 mg/m ³		TWA 5 mg/m ³	

Chemical Name	Poland	Denmark	Sweden	Finland	Norway
Carbon black	TWA 4.0 mg/m ³	TWA 3.5 mg/m ³	LLV 3 mg/m ³	TWA 3.5 mg/m ³ STEL 7 mg/m ³	TWA 3.5 mg/m ³ STEL 7 mg/m ³
Mequinol	TWA 5 mg/m ³	TWA 5 mg/m ³			TWA 5 mg/m ³ STEL 10 mg/m ³

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008 as amended.

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.