



SAFETY DATA SHEET

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

Important information *** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***

1.1. Product identifier

Trade name or designation of the mixture CN988 Series

Registration number -

UFI

Austria: JM3J-26VJ-D30T-91KE
Belgium: JM3J-26VJ-D30T-91KE
Bulgaria: JM3J-26VJ-D30T-91KE
Cyprus: JM3J-26VJ-D30T-91KE
Czech Republic: JM3J-26VJ-D30T-91KE
Denmark: JM3J-26VJ-D30T-91KE
Estonia: JM3J-26VJ-D30T-91KE
Finland: JM3J-26VJ-D30T-91KE
France: JM3J-26VJ-D30T-91KE
Germany: JM3J-26VJ-D30T-91KE
Greece: JM3J-26VJ-D30T-91KE
Hungary: JM3J-26VJ-D30T-91KE
Iceland: JM3J-26VJ-D30T-91KE
Ireland: JM3J-26VJ-D30T-91KE
Italy: JM3J-26VJ-D30T-91KE
Latvia: JM3J-26VJ-D30T-91KE
Liechtenstein: JM3J-26VJ-D30T-91KE
Lithuania: JM3J-26VJ-D30T-91KE
Luxembourg: JM3J-26VJ-D30T-91KE
Malta: JM3J-26VJ-D30T-91KE
Netherlands: JM3J-26VJ-D30T-91KE
Norway: JM3J-26VJ-D30T-91KE
Poland: JM3J-26VJ-D30T-91KE
Portugal: JM3J-26VJ-D30T-91KE
Romania: JM3J-26VJ-D30T-91KE
Slovakia: JM3J-26VJ-D30T-91KE
Slovenia: JM3J-26VJ-D30T-91KE
Spain: JM3J-26VJ-D30T-91KE
Sweden: JM3J-26VJ-D30T-91KE

Synonyms HP Scitex TJ100 Flash Yellow Ink

Issue date 25-Jun-2016

Version number 07

Revision date 06-Apr-2021

Supersedes date 27-Mar-2021

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

Identified uses Inkjet printing.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

HP Deutschland GmbH
Schickardstrasse 32
71034 Böblingen
Germany

Telephone

HP Inc. health effect line

(Toll-free within US) 1-800-457-4209

(Direct) 1-760-710-0048

HP Inc. Customer Care Line

(Toll-free within the US) 1-800-474-6836

(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

1.4 Emergency telephone number 1-760-710-0048

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 2-Butoxyethyl acetate, Cyclohexanone

Hazard pictograms



Signal word: Danger

Hazard statements

H332	Harmful if inhaled.
H318	Causes serious eye damage.
H312	Harmful in contact with skin.

Precautionary statements

Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.

Response

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a poison center/doctor if you feel unwell.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage: Not available.

Disposal

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information: None.

2.3. Other hazards: Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Material name: CN988 Series

11143 Version #: 07 Revision date: 06-Apr-2021 Issue date: 25-Jun-2016

SDS LIECHTENSTEIN

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General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
2-Butoxyethyl acetate	<80	112-07-2 203-933-3	01-2119475112-47-XXXX	607-038-00-2	#
Classification:	Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332				
2-methoxy-1-methylethylacetate	<20	108-65-6 203-603-9	01-2119475791-29-XXXX	607-195-00-7	#
Classification:	Flam. Liq. 3;H226, STOT SE 3;H336				
Cyclohexanone	<5	108-94-1 203-631-1	01-2119453616-35-XXXX	606-010-00-7	#
Classification:	Flam. Liq. 3;H226, Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Irrit. 2;H315, Eye Dam. 1;H318, Acute Tox. 4;H332				

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation	Move person to fresh air immediately. If symptoms persist, get immediate medical attention.
Skin contact	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Wash clothing separately before reuse. Get medical attention, if needed.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.
Ingestion	Rinse mouth out with water. If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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

Not available.

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

Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media	Suitable extinguishing media: sand, carbon dioxide (CO ₂), and dry chemical.
Unsuitable extinguishing media	Not available.

5.2. Special hazards arising from the substance or mixture

Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Avoid runoff into storm sewers and ditches which lead to waterways.
Special fire fighting procedures	Move containers from fire area if you can do it without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid contact with skin. Avoid inhalation of vapors or mists. Do not touch or walk through spilled material. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment to minimize exposure to skin and eye. In the case of vapor formation use a respirator with an approved filter.
For emergency responders	Not available.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Not available.

6.4. Reference to other sections

Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Wear personal protective equipment.
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, sparks and flame.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	MAK	133 mg/m ³
		20 ppm
	STEL	270 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	Ceiling	40 ppm
		550 mg/m ³
	MAK	100 ppm
Cyclohexanone (CAS 108-94-1)	MAK	275 mg/m ³
		50 ppm
	STEL	20 mg/m ³
		5 ppm
		80 mg/m ³
		20 ppm

Belgium. Exposure Limit Values

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	20 ppm
		550 mg/m ³
	TWA	100 ppm
Cyclohexanone (CAS 108-94-1)	STEL	275 mg/m ³
		50 ppm
	TWA	81.6 mg/m ³
		20 ppm
		40.8 mg/m ³
		10 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	20 ppm
		550 mg/m ³
		100 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	275 mg/m ³
		50 ppm
	STEL	81.6 mg/m ³
		20 ppm
	TWA	40.8 mg/m ³
		10 ppm

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	MAC	133 mg/m ³
		20 ppm
	STEL	333 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	MAC	275 mg/m ³
		50 ppm
	STEL	550 mg/m ³
Cyclohexanone (CAS 108-94-1)	MAC	40.8 mg/m ³
		10 ppm
	STEL	81.6 mg/m ³
		20 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	Ceiling	300 mg/m ³
	TWA	130 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	Ceiling	550 mg/m ³
	TWA	270 mg/m ³
Cyclohexanone (CAS 108-94-1)	Ceiling	80 mg/m ³
	TWA	40 mg/m ³

Denmark. Exposure Limit Values

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	TLV	134 mg/m ³
		20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TLV	275 mg/m ³
		50 ppm
Cyclohexanone (CAS 108-94-1)	TLV	41 mg/m ³
		10 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	20 ppm 550 mg/m ³
	TWA	100 ppm 275 mg/m ³
Cyclohexanone (CAS 108-94-1)	STEL	50 ppm 81.6 mg/m ³
	TWA	20 ppm 40.8 mg/m ³ 10 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	330 mg/m ³
	TWA	50 ppm 130 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	20 ppm 550 mg/m ³
	TWA	100 ppm 270 mg/m ³ 50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	82 mg/m ³
	TWA	20 ppm 41 mg/m ³ 10 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	VLE	333 mg/m ³
	Regulatory status: Regulatory binding (VRC)	50 ppm
	Regulatory status: Regulatory binding (VRC)	66.5 mg/m ³
	Regulatory status: Regulatory binding (VRC)	10 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	VLE	550 mg/m ³
	VME	110 ppm 275 mg/m ³ 50 ppm
Cyclohexanone (CAS 108-94-1)	VLE	81.6 mg/m ³
	VME	20 ppm 40.8 mg/m ³ 10 ppm

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
2-Butoxyethyl acetate (CAS 112-07-2)	TWA	66 mg/m ³	Vapor and aerosol.
		10 ppm	Vapor and aerosol.
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TWA	270 mg/m ³	
		50 ppm	

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
2-Butoxyethyl acetate (CAS 112-07-2)	AGW	130 mg/m ³	Vapor and aerosol.
		20 ppm	Vapor and aerosol.
2-methoxy-1-methylethylacetate (CAS 108-65-6)	AGW	270 mg/m ³	
		50 ppm	
Cyclohexanone (CAS 108-94-1)	AGW	80 mg/m ³	
		20 ppm	

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	270 mg/m ³
		40 ppm
	TWA	135 mg/m ³
		20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m ³
		100 ppm
	TWA	275 mg/m ³
		50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	400 mg/m ³
		100 ppm
	TWA	200 mg/m ³
		50 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		TWA
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m ³
		TWA
Cyclohexanone (CAS 108-94-1)	STEL	81.6 mg/m ³
		TWA
		40.8 mg/m ³

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
		TWA
		133 mg/m ³
		20 ppm

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m ³
		100 ppm
	TWA	275 mg/m ³ 50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	81.6 mg/m ³
		20 ppm
	TWA	40 mg/m ³ 10 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³ 20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m ³
		100 ppm
	TWA	275 mg/m ³ 50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	81.6 mg/m ³
		20 ppm
	TWA	40.8 mg/m ³ 10 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³ 20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m ³
		100 ppm
	TWA	275 mg/m ³ 50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	81.6 mg/m ³
		20 ppm
	TWA	40.8 mg/m ³ 10 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³ 20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m ³

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	100 ppm
		275 mg/m3
	STEL	50 ppm
		81.6 mg/m3
		20 ppm
TWA	40.8 mg/m3	
	10 ppm	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	140 mg/m3
		20 ppm
	TWA	70 mg/m3
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	10 ppm
		400 mg/m3
	TWA	75 ppm
Cyclohexanone (CAS 108-94-1)	STEL	250 mg/m3
		50 ppm
	TWA	81.6 mg/m3
		20 ppm
TWA	40.8 mg/m3	
	10 ppm	

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m3
		50 ppm
	TWA	133 mg/m3
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	20 ppm
		550 mg/m3
	TWA	100 ppm
Cyclohexanone (CAS 108-94-1)	STEL	275 mg/m3
		50 ppm
	TWA	81.6 mg/m3
		20 ppm
TWA	40.8 mg/m3	
	10 ppm	

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m3
		50 ppm
	TWA	133 mg/m3
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	20 ppm
		550 mg/m3
	TWA	100 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	275 mg/m ³
		50 ppm
	STEL	81.6 mg/m ³
		20 ppm
	TWA	40.8 mg/m ³
		10 ppm

Netherlands. OELs (binding)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
	TWA	135 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TWA	550 mg/m ³
Cyclohexanone (CAS 108-94-1)	STEL	50 mg/m ³

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	TLV	65 mg/m ³
		10 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TLV	270 mg/m ³
		50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	80 mg/m ³
		20 ppm
	TLV	40 mg/m ³
		10 ppm

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	300 mg/m ³
	TWA	100 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	520 mg/m ³
	TWA	260 mg/m ³
Cyclohexanone (CAS 108-94-1)	STEL	80 mg/m ³
	TWA	40 mg/m ³

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
	TWA	133 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)		20 ppm
	STEL	550 mg/m ³
		100 ppm
	TWA	275 mg/m ³
		50 ppm

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	STEL	81.6 mg/m3
		20 ppm
	TWA	40.8 mg/m3
		10 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	TWA	20 ppm
Cyclohexanone (CAS 108-94-1)	STEL	50 ppm
	TWA	20 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m3
		50 ppm
	TWA	133 mg/m3
		20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	81.6 mg/m3
		20 ppm
	TWA	40.8 mg/m3
		10 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m3
		50 ppm
	TWA	133 mg/m3
		20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	STEL	550 mg/m3
		100 ppm
	TWA	275 mg/m3
		50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	82 mg/m3
		20 ppm
	TWA	41 mg/m3
		10 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	TWA	133 mg/m3
		20 ppm
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TWA	275 mg/m3

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	50 ppm
		40.8 mg/m ³
		10 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	333 mg/m ³
		50 ppm
		133 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TWA	20 ppm
		550 mg/m ³
		100 ppm
Cyclohexanone (CAS 108-94-1)	STEL	275 mg/m ³
		50 ppm
		82 mg/m ³
	TWA	20 ppm
		41 mg/m ³
		10 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	Ceiling	333 mg/m ³
		50 ppm
		70 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TWA	10 ppm
		550 mg/m ³
		100 ppm
Cyclohexanone (CAS 108-94-1)	Ceiling	275 mg/m ³
		50 ppm
		81 mg/m ³
	TWA	20 ppm
		41 mg/m ³
		10 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	STEL	132 mg/m ³
		20 ppm
		66 mg/m ³
2-methoxy-1-methylethylacetate (CAS 108-65-6)	TWA	10 ppm
		275 mg/m ³
		50 ppm
Cyclohexanone (CAS 108-94-1)	STEL	275 mg/m ³
		50 ppm
		200 mg/m ³

Switzerland. SUVA Grenzwerte am Arbeitsplatz
Components **Type**

Value

TWA

50 ppm
 100 mg/m3
 25 ppm

UK. EH40 Workplace Exposure Limits (WELs)
Components **Type**

Value

2-Butoxyethyl acetate (CAS 112-07-2)

STEL

332 mg/m3

TWA

50 ppm
 133 mg/m3
 20 ppm

2-methoxy-1-methylethylacetate (CAS 108-65-6)

STEL

548 mg/m3

TWA

100 ppm
 274 mg/m3
 50 ppm

Cyclohexanone (CAS 108-94-1)

STEL

82 mg/m3

TWA

20 ppm
 41 mg/m3
 10 ppm

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU
Components **Type**

Value

2-Butoxyethyl acetate (CAS 112-07-2)

STEL

333 mg/m3

TWA

50 ppm
 133 mg/m3
 20 ppm

2-methoxy-1-methylethylacetate (CAS 108-65-6)

STEL

550 mg/m3

TWA

100 ppm
 275 mg/m3
 50 ppm

Cyclohexanone (CAS 108-94-1)

STEL

81.6 mg/m3

TWA

20 ppm
 40.8 mg/m3
 10 ppm

Biological limit values

Czech Republic. Limit Values for Indicators of Biological Exposure Tests in Urine and Blood, Annex 2, Tables 1 and 2, Government Decree 432/2003 Sb.

Components **Value** **Determinant** **Specimen** **Sampling Time**

2-Butoxyethyl acetate (CAS 112-07-2)

0.17 mmol/mmol

Butoxyacetic acid (with hydrolysis)

Creatinine in urine

*

Butoxyacetic acid (with hydrolysis)

Creatinine in urine

*

Cyclohexanone (CAS 108-94-1)

50 mg/g

1,2-Cyclohexanediol (with hydrolysis)

Creatinine in urine

*

0.049 mmol/mmol

1,2-Cyclohexanediol (with hydrolysis)

Creatinine in urine

*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethyl acetate (CAS 112-07-2)	100 mg/l	Butoxyessigsäure	Urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling Time
Cyclohexanone (CAS 108-94-1)	80 mg/l	1,2-Ciclohexanodiol, con hidrólisis	Urine	*
	8 mg/l	Ciclohexanol, con hidrólisis	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethyl acetate (CAS 112-07-2)	200 mg/l	Gesamt-Butoxyessigsäure	Urine	*
	100 mg/l	Butoxyessigsäure	Urine	*
Cyclohexanone (CAS 108-94-1)	100 mg/l	Gesamt-1,2-Cyclohexandiol	Urine	*

* - For sampling details, please see the source document.

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling Time
Cyclohexanone (CAS 108-94-1)	2 mmol/mol	Cyclohexanol	Creatinine in urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs)

Components	Type	Route	Value	Form
2-Butoxyethyl acetate (CAS 112-07-2)	Workers	Dermal	169 mg/kg	Systemic long term
		Dermal	120 mg/kg	Systemic acute short term
		Inhalation	333 mg/m ³	Local acute short term
		Inhalation	133 mg/m ³	Systemic long term
2-methoxy-1-methylethylacetate (CAS 108-65-6)	Workers	Dermal	796 mg/kg	Systemic long term
		Inhalation	275 mg/m ³	Systemic long term
Cyclohexanone (CAS 108-94-1)	Workers	Dermal	4 mg/kg bw/d	Systemic Long Term
		Dermal	4 mg/kg bw/d	Systemic Short Term
		Inhalation	80 mg/m ³	Local short term
		Inhalation	80 mg/m ³	Systemic short term
		Inhalation	40 mg/m ³	Local long term
		Inhalation	40 mg/m ³	Systemic long term

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
2-Butoxyethyl acetate (CAS 112-07-2)	Not applicable	Freshwater	0.304 mg/l	Releases
		Intermittent	0.56 mg/l	
		Marine water	0.0304 mg/l	
		Secondary	0.06 g/kg	Food poisoning
		Sediment	2.03 mg/kg	Freshwater
		Sediment	0.203 mg/kg	Marine water
		Soil	0.42 mg/kg	Sewage Treatment Plant
		STP	90 mg/l	
		Freshwater	0.635 mg/l	
2-methoxy-1-methylethylacetate (CAS 108-65-6)	Not applicable	Intermittent	6.35 mg/l	Releases
		Marine water	0.0635 mg/l	Freshwater
		Sediment	3.29 mg/kg	
		Sediment	0.329 mg/kg	

Components	Type	Route	Value	Form
Cyclohexanone (CAS 108-94-1)	Not applicable	Soil	0.29 mg/kg	Sewage Treatment Plant Releases
		STP	100 mg/l	
		Intermittent	0.329 mg/l	
		Marine water	0.00329 mg/l	
		Sediment	0.168 mg/kg	Freshwater
		Sediment	0.0168 mg/kg	Marine water
		Soil	0.0143 mg/kg	Sewage Treatment Plant
		STP	10 mg/l	

Exposure guidelines

EU Exposure Limit Values: Skin designation

2-Butoxyethyl acetate (CAS 112-07-2)	Can be absorbed through the skin.
2-methoxy-1-methylethylacetate (CAS Proprietary)	Can be absorbed through the skin.
Cyclohexanone (CAS 108-94-1)	Can be absorbed through the skin.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

2-Butoxyethyl acetate (CAS 112-07-2)	Can be absorbed through the skin.
2-methoxy-1-methylethylacetate (CAS Proprietary)	Can be absorbed through the skin.
Cyclohexanone (CAS 108-94-1)	Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Not available.

Individual protection measures, such as personal protective equipment

General information Not available.

Eye/face protection Wear safety glasses; chemical goggles (if splashing is possible).
Eye wash fountain and emergency showers are recommended.

Skin protection

- **Hand protection** Recommended gloves: Nitrile 6 mil minimum thickness.

- **Other** Wear appropriate chemical resistant clothing.

Respiratory protection Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Thermal hazards Not available.

Hygiene measures Do not get this material in contact with skin. Avoid contact with skin, eyes and clothing.
When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
Launder contaminated clothing before reuse.

Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Not available.

Form Liquid.

Color Yellow

Odor Solvent.

Odor threshold Not available.

pH 5.8 - 6.2 Metler Toledo pH Meter

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point ≥ 149.0 °F (≥ 65.0 °C) Closed Cup EPA Method 1020

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	13 - 14 cP Brookfield Viscometer T 22C Spindle #18 (S18) RPM 100
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	
VOC	< 878 g/L Calculated

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Stable at normal conditions.
10.3. Possibility of hazardous reactions	None known.
10.4. Conditions to avoid	Heat, flames and sparks.
10.5. Incompatible materials	Not available.
10.6. Hazardous decomposition products	Not available.

SECTION 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Inhalation	Harmful if inhaled.
Skin contact	Harmful in contact with skin.
Eye contact	Causes serious eye damage.
Ingestion	Ingestion is not a likely route of exposure.
Symptoms	Not available.

11.1. Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful in contact with skin.

Components	Species	Test Results
Cyclohexanone (CAS 108-94-1)		
<u>Acute</u>		
Inhalation		
Vapor		
LC50	Rat	> 6.2 mg/l, 4 Hours

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

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory sensitization Based on available data, the classification criteria are not met.

Skin sensitization Based on available data, the classification criteria are not met.

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

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

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cyclohexanone (CAS 108-94-1) 3 Not classifiable as to carcinogenicity to humans.

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

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	Not available.
Other information	Complete toxicity data are not available for this specific formulation.

SECTION 12: Ecological information

12.1. Toxicity	No toxicity data noted for the ingredient(s).
12.2. Persistence and degradability	Not available.
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	
Cyclohexanone	0.81
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Residual waste	Not available.
Contaminated packaging	Not available.
EU waste code	Not available.
Disposal methods/information	Do not dispose of together with general office waste. Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Ensure collection and disposal with an appropriately licensed waste contractor.

SECTION 14: Transport information

DOT	
UN number	NA1993
UN proper shipping name	Combustible liquid n.o.s. (2-methoxy-1-methylethyl acetate) -Not regulated in quantities less than 119 gallons
Transport hazard class(es)	
Class	Combustible
Subsidiary risk	-
Packing group	III
Special precautions for user	Not available.
DOT Supplemental Information	DOT Classification only applies to shipments within the US and Puerto Rico.
IATA	
UN number	Not available.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	No
Special precautions for user	Not available.
IMDG	
UN number	Not available.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not available.
Transport hazard class(es)	
Marine pollutant	No
EmS	Not available.
Special precautions for user	Not available.
ADR	
UN number	Not available.

UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Hazard No. (ADR)	Not available.
Tunnel restriction code	Not available.
Packing group	Not available.
Environmental hazards	No
Special precautions for user	Not available.

Further information Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

2-methoxy-1-methylethylacetate (CAS Proprietary)

Cyclohexanone (CAS 108-94-1)

Other regulations

All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

Other information

This Safety Data Sheet complies with the requirements of Regulation (EU) 2015/830. Classification according to Regulation (EC) No 1272/2008 as amended.

Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further rectifications and amendments).

National regulations

Not available.

15.2. Chemical safety assessment

See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

References

Regulation (EC) No. 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency (REACH).

Regulation (EU) 2015/830 of May 28, 2015 amending Regulation (EC) No. 1907/2006.

Regulation (EC) No. 1272/2008 of December 16, 2008 on classification, labeling and packaging of substances and mixtures, and amendments (CLP).

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.

Revision information

3. Composition / Information on Ingredients: Disclosure Overrides

Training information

Follow training instructions when handling this material.

Disclaimer

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds

Safe Use of Mixture Information (SUMI)

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Solvent based inks: SB01 *English*

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product SDS, the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.

The REACH registration number(s), where applicable, completes an extended product SDS.

Operational conditions

Maximum duration Up to 8 hours per day

Frequency of exposure < 240 days per year

Process conditions

- Covers use at ambient temperatures.
- Use of an integrated local exhaust ventilation is required in drying zone.
- Adequate ventilation should be provide for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides guidelines to ensure acceptable air quality in the workspace.
- Use explosion proof electrical equipment.
- Keep emissions below the occupational exposure limits of the ingredients specified in section 8 of the SDS.
- Avoid direct contact.
- Regular cleaning of equipment and work area.
- Supervision in place to check that Risk Management Measures are in place are being correctly used and Operational Conditions followed.

Risk management measures

Conditions and measures related to Personal Protection Equipment, hygiene and health evaluation

- Wear safety glasses with side shields (or goggles), if splashing is possible.
- Wear appropriate chemical resistant gloves: see section 8 of the SDS.
- Wear appropriate chemical resistant clothing.
- In case of inadequate ventilation wear respiratory protection.
- Eye wash fountain and emergency showers are recommended.
- Avoid breathing mist/vapours.
- Avoid contact with skin, eyes and clothing.
- Training of workers in relation to proper use and maintenance of all Personal protection equipment (PPE) must be ensured.



Good practice advice

- Use personal protective equipment as required.
- Wash hands before breaks and after work.
- Keep good industrial hygiene and safety practice.
- Use only with adequate ventilation.
- Do no eat, drink or smoke when using this product.
- Wash contaminated clothing before reuse.
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
- Store in a well-ventilated place.
- Keep container tightly closed.
- Store at room temperature.



Environmental measures

- Do not allow this material to drain into sewers/water supplies.
- Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.
- Ensure collection and disposal with appropriately licenced waste contractor.

Use descriptors

IS-Use at industrial sites

PW-Widespread use by professional workers

SU7-Printing and reproduction media

PC18-Inks and Toners

PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2-Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities

ERC5-Use at industrial site leading to inclusion into/onto article

ERC8c-Widespread use leading to inclusion into/onto article (indoor)

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture is provided.

The classification of the mixture is based on the individual ingredients and their concentration within the mixture.

All ingredients contributing to the classification are stated in Section 3 of the SDS.

Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people.

Section 2 of the SDS states these ingredients where applicable.