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

1.1. Product identifier

Product form : Mixture

Trade name : Ink for printers BSP41, Jet ID, Jet ID Eco

Product code : JETECC / Y2718734
JETECY / Y2718736
JETECM / Y2718735
JETECB / Y2718733
JETCCI / Y1116949
JETCMA / Y1116951
JETCNE / Y1116952
197362/JCCINE / Y4419475
197363/JCGINA / Y4419476
197361/JCMANE / Y4419477
134499 / Y3809025
134500 / Y3809026
134498 / Y3809023

Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Industrial use

Use of the substance/mixture : Inks and toner

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

WH Brady NV
Lindestraat 20
9240 Zele - Belgium
T +32 52457811
regulatory_compliance_EMEA@bradycorp.com

1.4. Emergency telephone number

Emergency number : +32 52457811
Only available during office hours.

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, 24/7, healthcare professionals only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

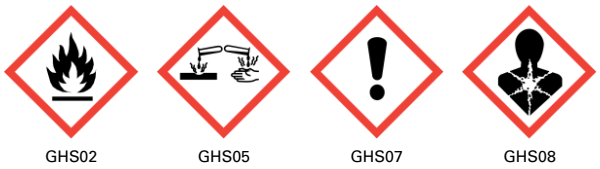
Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT RE 2	H373

Full text of H-statements: see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02 GHS05 GHS07 GHS08

Signal word : Danger

Hazardous ingredients : 4-(1-oxo-2-propenyl)-morpholine

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H302 - Harmful if swallowed.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe vapours.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P403+P235 - Store in a well-ventilated place. Keep cool.

2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : Not applicable.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4-(1-oxo-2-propenyl)-morpholine	(CAS-No.) 5117-12-4 (EC-No.) 418-140-1 (EC Index) 613-222-00-3	15 – 25	Acute Tox. 4 (Oral), H302 STOT RE 2, H373 Eye Dam. 1, H318 Skin Sens. 1, H317
Polyethylene glycol diacrylate	(CAS-No.) 26570-48-9 (EC-No.) 607-960-5	15 – 25	Eye Irrit. 2, H319
propan-2-ol; isopropyl alcohol; isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index) 603-117-00-0	1 – 15	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Symptoms may be delayed. Show this safety data sheet to the doctor in attendance.

Inhalation : Remove casualty to fresh air and keep warm and at rest. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. Avoid contact with : UV-radiation/sunlight. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion : Rinse mouth thoroughly with water. Drink plenty of water. Do NOT induce vomiting. Get medical advice/attention.

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

Inhalation : Inhalation of vapours in high concentration may cause irritation of respiratory system.

Skin contact : May cause an allergic skin reaction. The following symptoms may occur: Swelling. Redness, pain.

Eyes contact : Causes serious eye damage. The following symptoms may occur: Redness, pain.

Ingestion : Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Chronic symptoms : May cause damage to organs through prolonged or repeated exposure.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Highly flammable liquid and vapour. Heating will cause a rise in pressure with a risk of bursting.

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2). Nitrogen oxides (NOx).

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

Other information : Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use only non-sparking tools.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Dam up the liquid spill. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Flush contaminated areas with plenty of water. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

Concerning disposal elimination after cleaning, see section 13. Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use only non-sparking tools. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Incompatible materials : Oxidising agents. Free radical initiators. Strong acids. Strong bases. reactive metals (Al, K, Zn ...).

Storage temperature : < 40 °C

Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.

Special rules on packaging : Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep container tight closed.

Packaging materials : Keep only in the original container.

7.3. Specific end use(s)

Inks and toner.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
Austria	MAK (OEL TWA)	500 mg/m³
Austria	MAK (OEL TWA) [ppm]	200 ppm
Austria	MAK (OEL STEL)	2000 mg/m³ 2000 mg/m³ (STEL for large casting valid until December 31, 2013)
Austria	MAK (OEL STEL) [ppm]	800 ppm 800 ppm (STEL for large casting valid until December 31, 2013)
Belgium	OEL TWA	500 mg/m³
Belgium	OEL TWA [ppm]	200 ppm
Belgium	OEL STEL	1000 mg/m³
Belgium	OEL STEL [ppm]	400 ppm
Bulgaria	OEL TWA	980 mg/m³

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
Bulgaria	OEL STEL	1225 mg/m³
Croatia	GVI (OEL TWA) [1]	999 mg/m³
Croatia	GVI (OEL TWA) [2]	400 ppm
Croatia	KGVI (OEL STEL)	1250 mg/m³
Croatia	KGVI (OEL STEL) [ppm]	500 ppm
Croatia	Acetone (blood, End of shift): 50 mg/l (0,86 µmol/l) Acetone (Urine, End of shift): 50 mg/l (0,86 µmol/l)	
Czech Republic	PEL (OEL TWA)	500 mg/m³
Denmark	OEL TWA [1]	490 mg/m³
Denmark	OEL TWA [2]	200 ppm
Estonia	OEL TWA	350 mg/m³
Estonia	OEL TWA [ppm]	150 ppm
Estonia	OEL STEL	600 mg/m³
Estonia	OEL STEL [ppm]	250 ppm
Finland	HTP (OEL TWA) [1]	500 mg/m³ (Propanol)
Finland	HTP (OEL TWA) [2]	200 ppm (Propanol)
Finland	HTP (OEL STEL)	620 mg/m³
Finland	HTP (OEL STEL) [ppm]	250 ppm
France	VLE (OEL C/STEL)	980 mg/m³
France	VLE (OEL C/STEL) [ppm]	400 ppm
Germany	Occupational exposure limit value (mg/m³) (TRGS900)	500 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	Occupational exposure limit value (ppm) (TRGS900)	200 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	BLV	25 mg/l Parameter: Acetone - Medium: whole blood - Sampling time: end of shift 25 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift
Greece	OEL TWA	980 mg/m³
Greece	OEL TWA [ppm]	400 ppm
Greece	OEL STEL	1225 mg/m³
Greece	OEL STEL [ppm]	500 ppm
Hungary	AK (OEL TWA)	500 mg/m³
Hungary	CK (OEL STEL)	1000 mg/m³
Ireland	OEL TWA [2]	200 ppm
Ireland	OEL STEL [ppm]	400 ppm
Latvia	OEL TWA	350 mg/m³
Lithuania	IPRV (OEL TWA)	350 mg/m³
Lithuania	IPRV (OEL TWA) [ppm]	150 ppm
Lithuania	TPRV (OEL STEL)	600 mg/m³

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
Lithuania	TPRV (OEL STEL) [ppm]	250 ppm
Poland	NDS (OEL TWA)	900 mg/m³
Poland	NDSCh (OEL STEL)	1200 mg/m³
Portugal	OEL TWA [ppm]	200 ppm
Portugal	OEL STEL [ppm]	400 ppm
Romania	OEL TWA	200 mg/m³
Romania	OEL TWA [ppm]	81 ppm
Romania	OEL STEL	500 mg/m³
Romania	OEL STEL [ppm]	203 ppm
Slovakia	NPHV (OEL TWA) [1]	500 mg/m³
Slovakia	NPHV (OEL TWA) [2]	200 ppm
Slovakia	NPHV (OEL C)	1000 mg/m³
Slovenia	OEL TWA	500 mg/m³
Slovenia	OEL TWA [ppm]	200 ppm
Slovenia	OEL STEL	1000 mg/m³
Slovenia	OEL STEL [ppm]	400 ppm
Spain	VLA-ED (OEL TWA) [1]	500 mg/m³ (the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound is prohibited)
Spain	VLA-ED (OEL TWA) [2]	200 ppm (the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound is prohibited)
Spain	VLA-EC (OEL STEL)	1000 mg/m³
Spain	VLA-EC (OEL STEL) [ppm]	400 ppm
Sweden	NGV (OEL TWA)	350 mg/m³
Sweden	NGV (OEL TWA) [ppm]	150 ppm
Sweden	KTV (OEL STEL)	600 mg/m³
Sweden	KTV (OEL STEL) [ppm]	250 ppm
United Kingdom	WEL TWA (OEL TWA) [1]	999 mg/m³
United Kingdom	WEL TWA (OEL TWA) [2]	400 ppm
United Kingdom	WEL STEL (OEL STEL)	1250 mg/m³
United Kingdom	WEL STEL (OEL STEL) [ppm]	500 ppm
Norway	Grenseverdi (OEL TWA) [1]	245 mg/m³
Norway	Grenseverdi (OEL TWA) [2]	100 ppm
Norway	Korttidsverdi (OEL STEL)	306,25 mg/m³ (value calculated)
Norway	Korttidsverdi (OEL STEL) [ppm]	150 ppm (value calculated)
Switzerland	MAK (OEL TWA) [1]	500 mg/m³
Switzerland	MAK (OEL TWA) [2]	200 ppm
Switzerland	KZGW (OEL STEL)	1000 mg/m³
Switzerland	KZGW (OEL STEL) [ppm]	400 ppm
Australia	OES TWA [1]	983 mg/m³

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
Australia	OES TWA [2]	400 ppm
Australia	OES STEL	1230 mg/m³
Australia	OES STEL [ppm]	500 ppm
Canada (Quebec)	VECD (OEL STEL)	1230 mg/m³
Canada (Quebec)	VECD (OEL STEL) [ppm]	500 ppm
Canada (Quebec)	VEMP (OEL TWA)	985 mg/m³
Canada (Quebec)	VEMP (OEL TWA) [ppm]	400 ppm
USA - ACGIH	ACGIH OEL TWA [ppm]	200 ppm
USA - ACGIH	ACGIH OEL STEL [ppm]	400 ppm
USA - IDLH	IDLH [ppm]	2000 ppm (10% LEL)
USA - NIOSH	NIOSH REL TWA	980 mg/m³
USA - NIOSH	NIOSH REL TWA [ppm]	400 ppm
USA - NIOSH	NIOSH REL STEL	1225 mg/m³
USA - NIOSH	NIOSH REL STEL [ppm]	500 ppm
USA - OSHA	OSHA PEL TWA [1]	980 mg/m³
USA - OSHA	OSHA PEL TWA [2]	400 ppm

Additional information : Recommended monitoring procedures :. Personal air monitoring. Room air monitoring

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Organisational measures to prevent /limit releases, dispersion and exposure. See Section 7 for information on safe handling.

Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: Nitrile rubber gloves. Thickness : > 0.5 mm. Breakthrough time : Not determined. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection (EN166): tightly fitting safety goggles. face shield

Body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: (ABEK). The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)

Thermal hazard protection : Use dedicated equipment. Not required for normal conditions of use.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	Black. Yellow. Various.
Odour	:	slight.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting / freezing point	:	No data available
Freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable,liquid
Vapour pressure	:	No data available
Vapour density	:	No data available
Relative density	:	No data available
Solubility	:	Miscible with water.
Partition coefficient n-octanol/water	:	No data available
Kinematic viscosity	:	No data available
Dynamic viscosity	:	No data available
Explosive properties	:	Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	:	Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Explosive limits	:	No data available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour. Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. See Section 7 for information on safe handling.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. See Section 7 for information on safe handling.

10.5. Incompatible materials

Oxidising agents. Free radical initiators. Strong acids. Strong bases. reactive metals (Al, K, Zn ...). See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Reference to other sections 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Harmful if swallowed.

4-(1-oxo-2-propenyl)-morpholine :
Harmful if swallowed.

ATE CLP (oral)	2000 mg/kg bodyweight

4-(1-oxo-2-propenyl)-morpholine (5117-12-4)	
LD50/oral/rat	588 mg/kg
LD50/dermal/rat	> 2000 mg/kg
LC50/inhalation/4h/rat	5,28 mg/l

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50/oral/rat	> 2000 mg/kg
LD50/dermal/rabbit	4059 mg/kg
LC50/inhalation/4h/rat (ppm)	> 10000 ppm (Exposure time: 6 h)

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

pH: No data available

Serious eye damage/irritation : Causes serious eye damage.

4-(1-oxo-2-propenyl)-morpholine :
Causes serious eye damage.

pH: No data available

Respiratory or skin sensitisation : May cause an allergic skin reaction.

4-(1-oxo-2-propenyl)-morpholine :
May cause an allergic skin reaction.

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)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

4-(1-oxo-2-propenyl)-morpholine :
May cause damage to organs through prolonged or repeated exposure.

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

Ink for printers BSP41, Jet ID, Jet ID Eco	
Kinematic viscosity	No data available

Other adverse effects : May cause damage to organs through prolonged or repeated exposure.

Other information : Symptoms related to the physical, chemical and toxicological characteristics : Reference to other sections 4.2.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

11.2.2 Other information

Other adverse effects : May cause damage to organs through prolonged or repeated exposure.

Other information : Symptoms related to the physical, chemical and toxicological characteristics :Reference to other sections 4.2

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

4-(1-oxo-2-propenyl)-morpholine (5117-12-4)	
EC50 - Crustacea [1]	120 mg/l (Daphnia Magna)
EC50 72h - Algae [1]	120 mg/l

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 - Fish [1]	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)

EC50 - Other aquatic organisms [1]	> 1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
EC50 - Other aquatic organisms [2]	> 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
EC50 72h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)
EC50 96h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)

12.2. Persistence and degradability

Ink for printers BSP41, Jet ID, Jet ID Eco	
Persistence and degradability	No additional information available.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Ink for printers BSP41, Jet ID, Jet ID Eco	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	No additional information available.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Partition coefficient n-octanol/water	0,05 (at 25 °C)
Bioaccumulative potential	Low potential.

12.4. Mobility in soil

Ink for printers BSP41, Jet ID, Jet ID Eco	
Mobility in soil	No data available

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Partition coefficient n-octanol/water (Log Koc)	0,03

12.5. Results of PBT and vPvB assessment

Ink for printers BSP41, Jet ID, Jet ID Eco	
Results of PBT assessment	Not applicable

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Not applicable

12.7. Other adverse effects

Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities
The following Waste Codes are only suggestions:
080312 - waste ink containing dangerous substances .

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1210	1210	1210	1210	1210
14.2. UN proper shipping name				
PRINTING INK RELATED MATERIAL	PRINTING INK	Printing ink	PRINTING INK	PRINTING INK
Transport document description				
UN 1210 PRINTING INK RELATED MATERIAL, 3, I, (D/E)	UN 1210 PRINTING INK, 3, I	UN 1210 Printing ink, 3, I	UN 1210 PRINTING INK, 3, I	UN 1210 PRINTING INK, 3, I
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
I	I	I	I	I
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
Not applicable				

14.6. Special precautions for user

Special precautions for user : Not applicable

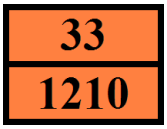
- Overland transport

Classification code (ADR) : F1

Special provisions : 163, 367

Limited quantities (ADR) : 500ml

Excepted quantities (ADR) : E3

Packing instructions (ADR)	: P001
Mixed packing provisions (ADR)	: MP7, MP17
Portable tank and bulk container instructions (ADR)	: T11
Portable tank and bulk container special provisions (ADR)	: TP1, TP8
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: FL
Transport category (ADR)	: 1
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	: 
Tunnel restriction code	: D/E
EAC code	: •3YE

- Transport by sea

Special provisions (IMDG)	: 163, 367
Limited quantities (IMDG)	: 500 ml
Excepted quantities (IMDG)	: E3
Packing instructions (IMDG)	: P001
Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP1, TP8
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: E
Properties and observations (IMDG)	: Fluid or viscous liquid containing colouring matter in solution or suspension. Miscibility with water depends upon the solvent.

- Air transport

PCA Excepted quantities (IATA)	: E3
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 351
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 361
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3, A72, A192
ERG code (IATA)	: 3L

- Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 163, 367

Limited quantities (ADN) : 500 ml
Excepted quantities (ADN) : E3
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : F1
Special provisions (RID) : 163, 367
Limited quantities (RID) : 500ml
Excepted quantities (RID) : E3
Packing instructions (RID) : P001
Mixed packing provisions (RID) : MP7, MP17
Portable tank and bulk container instructions (RID) : T11
Portable tank and bulk container special provisions (RID) : TP1, TP8
Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 1
Hazard identification number (RID) : 33

14.7. Maritime transport in bulk according to IMO instruments

Code: IBC : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

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

3(a) 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 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	propan-2-ol; isopropyl alcohol; isopropanol
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 for printers BSP41, Jet ID, Jet ID Eco ; 4-(1-oxo-2-propenyl)-morpholine ; propan-2-ol; isopropyl alcohol; isopropanol
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	propan-2-ol; isopropyl alcohol; isopropanol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

France

No ICPE	Installations classées Désignation de la rubrique	Code Régime	Rayon
4331.text	Liquides inflammables de catégorie 2 ou catégorie 3 à l'exclusion de la rubrique 4330. La quantité totale susceptible d'être présente dans les installations y compris dans les cavités souterraines étant :		
4331.1	1. Supérieure ou égale à 1000 t Quantité seuil bas au sens de l'article R. 511-10 : 5 000 t. Quantité seuil haut au sens de l'article R. 511-10 : 50 000 t.	A	2
4331.2	2. Supérieure ou égale à 100 t mais inférieure à 1000 t Quantité seuil bas au sens de l'article R. 511-10 : 5 000 t. Quantité seuil haut au sens de l'article R. 511-10 : 50 000 t.	E	
4331.3	3. Supérieure ou égale à 50 t mais inférieure à 100 t Quantité seuil bas au sens de l'article R. 511-10 : 5 000 t. Quantité seuil haut au sens de l'article R. 511-10 : 50 000 t.	DC	

Germany

Regulatory reference : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

German storage class (LGK) : LGK 3 - Flammable liquids

Hazardous Incident Ordinance (12. BImSchV) : Listed in the 12. BImSchV (Annex I) under: 1.2.5.3

Quantity threshold for operational area under § 1 para. 1

- Sentence 1: 5000000 kg
- Sentence 2: 50000000 kg

Netherlands

Waterbezwaarlijkheid : B (4) - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

Not required

SECTION 16: Other information

Indication of changes:

1.2	Main use category	Added	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	Description of first aid measures	Modified	
4.3	Indication of any immediate medical attention and special treatment needed	Modified	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
7.2	Incompatible materials	Added	
7.2	Heat and ignition sources	Added	
7.3	Specific end use(s)	Added	
8.2	Hand protection	Modified	
9.1	Odour	Modified	
9.1	Solubility	Added	
10.4	Conditions to avoid	Modified	
10.5	Incompatible materials	Modified	
11.2	Adverse health effects caused by endocrine disrupting properties	Added	
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	
15.1	Installations classées	Added	
15.1	Water hazard class (WGK)	Modified	
15.1	German storage class (LGK)	Added	
15.1	Waterbezwaarlijkheid	Added	
16	Training advice	Added	
16	Other information	Added	

Abbreviations and acronyms:

	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	CSR = Chemical Safety Report
	EC50 = Median Effective Concentration
	LD50 = Median lethal dose
	LC50 = Median lethal concentration
	TLV = Threshold limits
	TWA = time weighted average

	STEL = Short term exposure limit
	NA = Not applicable
	PBT = persistent, bioaccumulating and toxic (PBT).
	vPvB = very persistent and very bioaccumulating
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)
	ABM = Algemene beoordelingsmethodiek
	BTT = Breakthrough time (maximum wearing time)
	DMEL = Derived Minimal Effect level
	DNEL = Derived No Effect Level
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	EWC = European waste catalogue
	LL50 = Median lethal level
	NOEC = No observed effect concentration
	NOEL: no-observed-effect level
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	VOC = Volatile organic compounds

Sources of key data used to compile the datasheet : ECHA (European Chemicals Agency). Supplier SDS.

Training advice : Training staff on good practice. Manipulations are to be done only by qualified and authorised persons.

Other information : Classification - Assessment method: CLP Calculation method (Article 9).

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

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