

Ink Remover

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 03/09/2014

Version: 1.0

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

1.1. Product identifier

Trade name : Ink Remover
 Product code : C181
 Other means of identification : Solvent-based ink remover – intended for low-volume use to treat small ink spots followed by post-rinse with aqueous cleaning solution

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
 Professional
 Use of the substance/mixture : Spot treatment for ink stains on carpet and fabric

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer:

Harris Research, Inc.
 1530 North 1000 West
 Logan, UT 84321 USA
 1-435-755-0099 (For product information)

Supplier:

Harris Research, Inc.
 1530 North 1000 West
 Logan, UT 84321 USA
 1-435-755-0099
 1-800-424-9300
 1-703-527-3887

Denmark, Norway, Sweden
 Chem-Dry Nordic Aps
 Munkegaardsvej 21
 Kivstgaard, 3490
 45-48-14-44-18
 th@chemdry.dk

Chem-Dry France
 Parc d'activites "Le Prieure"
 RuePaulin Viry
 37530 Poce-sur-Cisse
 +33 761 8906 79
 a.baba@chemdry-france.fr

Chem-Dry of Ireland LTD
 Unit 30 Tolka Valley Business Park
 Ballyboggan Road, Glasnevin
 Dublin, DN011
 353 1 830 3940
 john@chemdry.ie

Chem-Dry Luxembourg S.A.
 Rue De La Continentale
 Zac Zaemer
 Bascharage, L-4917
 652 26 35 00 20
 info@chemdry.lu

Netherlands, Belgium, Germany
 Chem-Dry Netherlands BV
 Vijfhuizenberg 127
 Roosendaal, 4708 AJ
 31(0)165-570 610
 info@chemdry.nl

Portugal/Angola
 Ambiclean-Limpeza De Alcatifas, LDA
 Rua Samaora Machel N 3-D
 Urbanizacao Alto Da Eira
 Sta Iria Da Azoia, 2695-395
 351 21 953 00 33
 info@chemdryportugal.com

Switzerland/Lichtenstein
 Chem-Dry Switzerland
 Kellerhofstrasse 11
 Elgg, 8353
 (41)523643031
liz.prohaska@procamed.ch

UK/England/Scotland/Wales
 Chem-Dry® Franchising Ltd.
 Belprin Road
 Beverley, East Yorkshire HU17 0LP
 44 01482 678 645
 e.info@chemdry.co.uk

1.4. Emergency telephone number

Emergency number : Chemtrec (USA only) (800) 424-9300
 Chemtrec (Outside USA) +1 703-527-3887

Europe 112
Austria +43 1 406 43 43
Belgium Poison center (BE): +32 70 245 245
Denmark Poison Control Hotline (DK): +45 82 12 12 12
Finland Poison Information Centre (FI):+358 9 471 977
France ORFILA (FR): + 01 45 42 59 59
Germany Poison Center Berlin (DE): +49 030 30686 790
 Poison Center Nord: +49 551 19240 (24h available English / German)
 National Poisons Information Centre (IE): +353 1 8379964
Ireland +354 543 2222
Iceland

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Italy
Luxembourg
Netherlands

Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom

Poison Center, Milan (IT): +39 02 6610 1029
112
National Poisons Information Center (NL): +31 30 274 88 88
(NB: this service is only available to health professionals)
Poisons Information (NO):+ 47 22 591300
Poison Information Center (PT): +351 21 330 3284
Poison Information Service (ES): +34 91 562 04 20
Poisons Information Center (SV):+46 8 33 12 31
Poison Center: Tel 145; +41 44 251 51 51
NHS Direct (UK): +44 (0) 845 46 47; 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Irrit. 2 H315
Eye Irrit. 2 H319
Repr. 1B H360
STOT SE 3 H335

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Repr.Cat.1; R61
Xi; R36/37/38

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H360 - May damage fertility or the unborn child (if swallowed)

Precautionary statements (CLP)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing vapours, mist, spray, fume, dust
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - IF exposed or concerned: Get medical advice/attention
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Ink Remover

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
1-Methyl-2-pyrrolidone substance listed as REACH Candidate	(CAS No) 872-50-4 (EC no) 212-828-1 (EC index no) 606-021-00-7	60 - 100	Xi; R36/37/38 Repr.Cat.1; R61
Name	Product identifier	Specific concentration limits	
1-Methyl-2-pyrrolidone	(CAS No) 872-50-4 (EC no) 212-828-1 (EC index no) 606-021-00-7	(C >= 5) R61 (C >= 10) Xi;R36/37/38	
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-Methyl-2-pyrrolidone substance listed as REACH Candidate	(CAS No) 872-50-4 (EC no) 212-828-1 (EC index no) 606-021-00-7	60 - 100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360D STOT SE 3, H335
Name	Product identifier	Specific concentration limits	
1-Methyl-2-pyrrolidone	(CAS No) 872-50-4 (EC no) 212-828-1 (EC index no) 606-021-00-7	(C >= 5) Repr. 1B, H360D (C >= 10) STOT SE 3, H335	

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: In all cases of doubt, or when symptoms persist, seek medical advice. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. Get medical advice/attention.
First-aid measures after eye contact	: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Give water to drink if victim completely conscious/alert. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician.

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

Symptoms/injuries	: May damage fertility or the unborn child (Oral).
Symptoms/injuries after inhalation	: May cause respiratory irritation. Headaches.
Symptoms/injuries after skin contact	: Causes skin irritation. May be absorbed through the skin. Prolonged/repetitive skin contact may cause skin defatting or dermatitis. Skin rash/inflammation.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Redness. Blurred vision.
Symptoms/injuries after ingestion	: May cause irritation in mouth, gullet and stomach. May damage fertility. May damage the unborn child. (developmental effects).

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Carbon dioxide. Alcohol resistant foam. Sand. Water spray.
Unsuitable extinguishing media	: Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours.
Explosion hazard	: Releases vapours above flash point. Vapours may form flammable and explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Use water spray to cool unopened containers.
Protective equipment for firefighters	: Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus.

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Other information : Toxic and irritating gases are released following thermal decomposition or combustion. Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate all ignition sources if safe to do so. Under fire conditions closed containers may rupture or explode. Spilled material may present a slipping hazard. No action shall be taken involving any personal risk or without suitable training.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist or spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact during pregnancy/while nursing.

Hygiene measures : 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide adequate ventilation. Ventilation along the floor. A washing facility/water for eye and skin cleaning purposes should be present.

Storage conditions : Keep out of reach of children. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

Incompatible materials : light metals. This material may attack some forms of plastics, rubbers and coatings. Strong oxidizing agents (like fluorite, perchlorates, chlorine dioxide, nitrates, permanganates and peroxides): may react violently and rises fire and explosion risk . Strong acids, bases. Reducing agents. For further information, refer to section 10 : "Stability and Reactivity".

Heat and ignition sources : Store away from direct sunlight or other heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-Methyl-2-pyrrolidone (872-50-4)		
EU	IOELV TWA (mg/m ³)	40 mg/m ³
EU	IOELV TWA (ppm)	10 ppm
EU	IOELV STEL (mg/m ³)	80 mg/m ³
EU	IOELV STEL (ppm)	20 ppm
Austria	MAK (mg/m ³)	40 mg/m ³
Austria	MAK (ppm)	10 ppm
Austria	MAK Short time value (mg/m ³)	80 mg/m ³
Austria	MAK Short time value (ppm)	20 ppm
Belgium	Short time value (mg/m ³)	80 mg/m ³
Belgium	Short time value (ppm)	20 ppm

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1-Methyl-2-pyrrolidone (872-50-4)		
Bulgaria	OEL TWA (mg/m ³)	40 mg/m ³
Bulgaria	OEL TWA (ppm)	10 ppm
Bulgaria	OEL STEL (mg/m ³)	80 mg/m ³
Bulgaria	OEL STEL (ppm)	20 ppm
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	40 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	10 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	80 mg/m ³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	20 ppm
Cyprus	OEL TWA (mg/m ³)	40 mg/m ³
Cyprus	OEL TWA (ppm)	10 ppm
Cyprus	OEL STEL (mg/m ³)	80 mg/m ³
Cyprus	OEL STEL (ppm)	20 ppm
Czech Republic	Expoziční limity (PEL) (mg/m ³)	40 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	20 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	5 ppm
Estonia	OEL TWA (mg/m ³)	200 mg/m ³
Estonia	OEL TWA (ppm)	50 ppm
Estonia	OEL STEL (mg/m ³)	300 mg/m ³
Estonia	OEL STEL (ppm)	75 ppm
Finland	HTP-arvo (8h) (mg/m ³)	40 mg/m ³
Finland	HTP-arvo (8h) (ppm)	10 ppm
Finland	HTP-arvo (15 min)	80 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	20 ppm
France	VME (mg/m ³)	40 mg/m ³
France	VME (ppm)	10 ppm
France	VLE (mg/m ³)	80 mg/m ³
France	VLE (ppm)	20 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	82 mg/m ³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 900 Occupational exposure limit value (ppm)	20 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 903 (BGW)	150 mg/l (Medium: urine - Time: end of shift - Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone)
Gibraltar	OEL TWA (mg/m ³)	40 mg/m ³
Gibraltar	OEL TWA (ppm)	10 ppm
Gibraltar	OEL STEL (mg/m ³)	80 mg/m ³
Gibraltar	OEL STEL (ppm)	20 ppm
Greece	OEL TWA (mg/m ³)	40 mg/m ³
Greece	OEL TWA (ppm)	10 ppm
Greece	OEL STEL (mg/m ³)	80 mg/m ³
Greece	OEL STEL (ppm)	20 ppm
Hungary	AK-érték	40 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	101 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	25 ppm
Latvia	OEL TWA (mg/m ³)	40 mg/m ³
Latvia	OEL TWA (ppm)	10 ppm
Lithuania	IPRV (mg/m ³)	40 mg/m ³
Lithuania	IPRV (ppm)	10 ppm
Lithuania	TPRV (mg/m ³)	80 mg/m ³
Lithuania	TPRV (ppm)	20 ppm
Luxembourg	OEL TWA (mg/m ³)	40 mg/m ³

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1-Methyl-2-pyrrolidone (872-50-4)		
Luxembourg	OEL TWA (ppm)	10 ppm
Luxembourg	OEL STEL (mg/m ³)	80 mg/m ³
Luxembourg	OEL STEL (ppm)	20 ppm
Malta	OEL TWA (mg/m ³)	40 mg/m ³
Malta	OEL TWA (ppm)	10 ppm
Malta	OEL STEL (mg/m ³)	80 mg/m ³
Malta	OEL STEL (ppm)	20 ppm
Netherlands	Grenswaarde TGG 8H (mg/m ³)	40 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	80 mg/m ³
Poland	NDS (mg/m ³)	40 mg/m ³
Poland	NDSch (mg/m ³)	80 mg/m ³
Portugal	OEL TWA (mg/m ³)	40 mg/m ³ (indicative limit value)
Portugal	OEL TWA (ppm)	10 ppm (indicative limit value)
Portugal	OEL STEL (mg/m ³)	80 mg/m ³ (indicative limit value)
Portugal	OEL STEL (ppm)	20 ppm (indicative limit value)
Romania	OEL TWA (mg/m ³)	40 mg/m ³
Romania	OEL TWA (ppm)	10 ppm
Romania	OEL STEL (mg/m ³)	80 mg/m ³
Romania	OEL STEL (ppm)	20 ppm
Slovenia	OEL TWA (mg/m ³)	40 mg/m ³
Slovenia	OEL TWA (ppm)	10 ppm
Slovenia	OEL STEL (mg/m ³)	80 mg/m ³
Slovenia	OEL STEL (ppm)	20 ppm
Spain	VLA-ED (mg/m ³)	40 mg/m ³ (indicative limit value)
Spain	VLA-ED (ppm)	10 ppm (indicative limit value)
Spain	VLA-EC (mg/m ³)	80 mg/m ³
Spain	VLA-EC (ppm)	20 ppm
Sweden	nivågränsvärde (NVG) (mg/m ³)	200 mg/m ³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m ³)	300 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	75 ppm
United Kingdom	WEL TWA (mg/m ³)	40 mg/m ³
United Kingdom	WEL TWA (ppm)	10 ppm
United Kingdom	WEL STEL (mg/m ³)	309 mg/m ³
United Kingdom	WEL STEL (ppm)	75 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	20 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	5 ppm
Norway	Gjennomsnittsverdier (Kortidsverdi) (mg/m ³)	80 mg/m ³ (listed in the List of Administrative Norms)
Norway	Gjennomsnittsverdier (Kortidsverdi) (ppm)	20 ppm (listed in the List of Administrative Norms)
Switzerland	VME (mg/m ³)	80 mg/m ³
Switzerland	VME (ppm)	20 ppm
Switzerland	VLE (mg/m ³)	160 mg/m ³
Switzerland	VLE (ppm)	40 ppm
Australia	TWA (mg/m ³)	103 mg/m ³
Australia	TWA (ppm)	25 ppm
Australia	STEL (mg/m ³)	309 mg/m ³
Australia	STEL (ppm)	75 ppm

8.2. Exposure controls

Appropriate engineering controls

: Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

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Personal protective equipment : Avoid all unnecessary exposure. For certain operations, additional Personal Protection Equipment (PPE) may be required. Gloves. Protective goggles. Protective clothing.



Hand protection : Wear suitable gloves resistant to chemical penetration. Wear gloves to EN374 resistant to the solvent(s) in use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection : Chemical goggles or safety glasses. with side-shields.

Skin and body protection : Wear suitable protective clothing. Personal protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling.

Respiratory protection : Wear appropriate mask. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Use approved organic vapor respirator if ventilation is not sufficient. Of particular concern are when filling, emptying or maintaining your cleaning equipment and at other instances where there is a the likelihood of high emissions of solvent vapor.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
odour	: Mild amine-like.
Odour threshold	: No data available
pH	: No data available
pH solution	: 7.7 – 8 (100 g/l aqueous)
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: -24 °C
Boiling point	: 202 °C
Flash point	: 96 °C (204.8 °F)
Auto-ignition temperature	: 346 °C (654.8 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammability limits in air 1.3 – 9.5 Vol. %
Vapour pressure	: 0.5 mm Hg @ 25°C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.028 (water =1)
Solubility	: Water: completely soluble
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 1.67 mPa.s (20 d)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. heat/sparks/open flames/hot surfaces. Moisture.

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10.5. Incompatible materials

Strong oxidizing agents (like fluorite, perchlorates, chlorine dioxide, nitrates, permanganates and peroxides): may react violently and rises fire and explosion risk . Strong acids. Strong bases. Reducing agents. This material may attack some forms of plastics, rubbers and coatings. light metals. Carbon disulfide. Sulfur. Chlorinated solvents.

10.6. Hazardous decomposition products

On heating/burning: release of (highly) toxic gases/vapours e.g.: carbon monoxide - carbon dioxide. Fume. Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

1-Methyl-2-pyrrolidone (872-50-4)	
LD50 oral rat	3598 mg/kg
LD50 dermal rabbit	8 g/kg
LC50 inhalation rat (mg/l)	3.1 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Based on available data, the classification criteria are not met
Reproductive toxicity : May damage fertility or the unborn child (if swallowed).
Specific target organ toxicity (single exposure) : May cause respiratory irritation.
Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met
Aspiration hazard : Not classified
Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

1-Methyl-2-pyrrolidone (872-50-4)	
LC50 fishes 1	832 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	4897 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	1072 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and degradability

Ink Remover	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Ink Remover	
Bioaccumulative potential	Not established.

1-Methyl-2-pyrrolidone (872-50-4)	
Log Pow	-0.46 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
1-Methyl-2-pyrrolidone (872-50-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

: Avoid release to the environment

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with applicable local, national and international regulations. Do not re-use empty containers. Can be incinerated according to local regulations. Ensure all national/local regulations are observed. Consult the appropriate authorities about waste disposal.
Additional information	: Do not re-use empty containers. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.
Ecology - waste materials	: Avoid release to the environment. Do not allow into drains or water courses.

SECTION 14: Transport information

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

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

14.6.2. Transport by sea

14.6.3. Air transport

14.6.4. Inland waterway transport

Not subjected to ADN : No

14.6.5. Rail transport

Carriage prohibited (RID) : No

Ink Remover

Safety Data Sheet

according to Regulation (EC) No. 453/2010

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

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

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Ink Remover
30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Toxic to Reproduction category 1A or 1B (Table 3.1) or Toxic to Reproduction category 1 or 2 (Table 3.2) and listed as follows: Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5 Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6	1-Methyl-2-pyrrolidone

Contains REACH Candidate List substance(s): 1-Methyl-2-pyrrolidone (EC 212-828-1, CAS 872-50-4)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Sources of Key data : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H360D	May damage the unborn child
R36/37/38	Irritating to eyes, respiratory system and skin
R61	May cause harm to the unborn child
Xi	Irritant

SDS EU (REACH Annex II)

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