

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

1.1. Product identifier

Product name	SoluJET®2780K
Synonym(s)	Black ink
Registration number REACH	Not applicable (mixture)

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

Recommended use	Ink for inkjet printing
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1.3. Details of the supplier of the safety data sheet

Company identification	MYLAN GROUP Long Duc Industrial Park Tra Vinh City, Tra Vinh Province, Vietnam Tel. +84-294-3846-997 Fax +84-294-3846-998
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1.4. Emergency telephone number

Phone number:	+84-294-3846-997
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Section 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP):

Physical hazards	Flammable liquids. Category 2, H225
Health hazards	Eye irritation (Category 2), H319 Reproductive toxicity (Category 1B) H360D

2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008 (CLP):

Pictograms



GHS02

GHS08

GHS07

Signal word

Danger

Hazard statements

H225- Highly flammable liquid and vapor.
H319- Causes serious eye damage.
H360D-May damage the unborn child

Precautionary statements

Prevention

P201 - Obtain special instructions before use.

	<p>P202 - Do not handle until all safety precautions have been read and understood.</p> <p>P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.</p> <p>P233 - Keep container tightly closed.</p> <p>P240 - Ground/Bond container and receiving equipment.</p> <p>P241 - Use explosion-proof electrical/ventilating/lighting/equipment.</p> <p>P242 - Use only non-sparking tools.</p> <p>P243 - Take precautionary measures against static discharge.</p> <p>P264 - Wash thoroughly after handling.</p> <p>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</p>			
Response	<p>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P313: IF exposed or concerned: Get medical advice/attention.</p> <p>P370+P378- In case of fire: for small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam to extinguish. For large fires, use water spray, fog, or alcohol-resistant foam to extinguish. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.</p>			
Storage	<p>P403 + P235 - Store in a well-ventilated place. Keep cool.</p> <p>P405 - Store locked up.</p>			
Disposal	<p>P501- Dispose of contents/container in accordance with local/regional/national/ international regulations.</p>			
2.3. Other hazards				
PBT Substances	None			
vPvB Substances:	None			
Other hazards	No other hazards			
Section 3: Composition/information on ingredients				
3.1. Substance	No			
3.2. Mixtures				
Hazardous Components (Chemical Name)/ REACH Registration No.	CAS Number	Concentration (%)	EC No./ EC index No	Classification
Ethanol	64-17-5	>70	200-578-6 603-002-00-5	Flam. Liq. 2, H225 Eye Irrit. 2, H319
1-methoxy-2-propanol	107-98-2	<10	203-539-1 603-064-00-3	Flam. Liq. 3: H226 STOT SE 3: H336
Cyclohexanone	108-94-1	<5	20203-631-1 606-010-00-7	Flam. Liq. 3: H226 Acute Tox. 4: H332
Acetone	67-64-1	<5	200-662-2 606-001-00-8	Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H336
Metal complex dye	Proprietary	<10	NA	Repr. 1B (unborn child): H360D

Section 4: First-aid measures

4.1. Description of first aid measures

In case of:

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/ effects, acute and delayed

See section 11

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

No special treatment needed, treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media sand, carbon dioxide (CO₂) or dry chemical.

Unsuitable extinguishing media Not available.

5.2. Special hazards arising from the substance or mixture

Not applicable.

5.3. Advice for firefighters

Special protective equipment and precautions for firefighters Firefighters should wear full protective clothing including self-contained breathing apparatus. Avoid run off into storm sewers and ditches which lead to waterways.

Fire-fighting equipment/instructions 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

6.1.1. For non-emergency personnel Keep unprotected people away, allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders 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.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Not available.

6.4. Reference to other sections

For further and detailed information see section 8 and 13.

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.

Section 8. Exposure controls/personal protection

8.1 Control parameters National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA (ppm)	TWA (mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Source
EU	Cyclohexanone	108-94-1		IOELV	10	40.8	20	81.6	2000/39/EC
MT	Cyclohexanone	108-94-1		OELV	10	40.8	20	81.6	L.N. 227
EU	Acetone	67-64-1			500	1210			2000/39/EC
EU	1-methoxy-2-propanol	107-98-2		IOELV	100	375	150	568	2000/39/EC
MT	1-methoxy-2-propanol	107-98-2		OELV	100	375	150	568	CAP. 424
	Ethanol	64-17-5	Data are not available						

Relevant DNELs/DMELs/PNECs and other threshold levels

- human health values

	End point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Ethanol	DNEL	1.900 mg/m ³	human, inhalatory	worker (industry)	acute- systemic effects
	DNEL	343 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
	DNEL	950 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Cyclohexanone	DNEL	20 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
	DNEL	20 mg/m ³	human, inhalatory	worker (industry)	chronic – local effects
	DNEL	20 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects

Acetone	DNEL	2.400 mg/m ³	human, inhalatory	worker (industry)	acute- systemic effects
	DNEL	1 210 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
	DNEL	186 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
1-methoxy-2-propanol	DNEL	553.5 mg/m ³	human, inhalatory	worker (industry)	acute- systemic effects
	DNEL	369 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
	DNEL	183 mg/kg	human, dermal	worker (industry)	chronic - systemic effects

• environmental values

	End point	Threshold level	Environmental compartment
Ethanol	PNEC	0,79 mg/cm ³	marine water
	PNEC	2,75 mg/cm ³	air
	PNEC	3,6 mg/cm ³	freshwater sediment
	PNEC	580 mg/cm ³	sewage treatment plant (STP)
	PNEC	0,63 mg/cm ³	soil
	PNEC	0,96 mg/cm ³	freshwater
Cyclohexanone	PNEC	0,0329 mg/cm ³	marine water
	PNEC	0,0951 mg/cm ³	freshwater sediment
	PNEC	0,0329 mg/cm ³	freshwater
	PNEC	0,0143 mg/cm ³	soil
Acetone	PNEC	10.6 mg/L	freshwater
	PNEC	1.06 mg/L	marine water
	PNEC	100 mg/L	sewage treatment plant (STP)
	PNEC	30.4 mg/kg	freshwater sediment
	PNEC	29.5 mg/kg	soil
1-methoxy-2-propanol	PNEC	10 mg/L	freshwater
	PNEC	1 mg/L	marine water
	PNEC	100 mg/L	sewage treatment plant (STP)
	PNEC	5.2 mg/kg	freshwater sediment
	PNEC	4.59 mg/kg	soil

8.2 Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

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

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

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

Thermal hazards

Not available.

General hygiene considerations

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.

Laundry contaminated clothing before reuse.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Black liquid
Odor	Characteristic
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point;	Not available.
Initial boiling point and boiling range	>70°C
Flash point	16°C (closed-cup)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.

Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	Not available.	
Solubility(ies)	Soluble in ethanol.	
Partition coefficient: n-octanol/water	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity (cPs)	Not available.	
9.2 Other information	Not available.	
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	Hazardous combustion products: see section 5	
Section 11. Toxicological information		
11.1 Information on toxicological effects		
Acute toxicity value		
Components	Species	Test results
Ethanol (CAS 64-17-5)		
Acute		
Inhalation (LC50)	Mouse	39 mg/l, 4 Hours
	Rat	20000 mg/l, 10 Hours
Oral (LD50)	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	Mouse 3450 mg/kg
	Rat	Rat 7060 mg/kg
		6.2 g/kg

Cyclohexanone (CAS 108-94-1)**Acute**

Inhalation (LC50)	Rat	> 6.2 mg/l, 4 Hours
Dermal (LD50)	rabbit	3,160 mg/kg
Oral (LD50)	Rat	1,534 mg/kg

Acetone (CAS 67-64-1)**Acute**

Inhalation (LC50)	Rat	50.100 mg/m ³
Oral (LD50)	Rat	5.800 mg/kg
Dermal (LD50)	Guinea pig	7.426 mg/kg

1-methoxy-2-propanol (CAS 107-98-2)**Acute**

Inhalation (LC50)	Rat	10,000 mg/l, 5 Hour
Oral (LD50)	Mouse	11,700mg/kg
Dermal (LD50)	Rabbit	13,000mg/kg

Skin corrosion/irritation

Skin Contact: May cause skin irritation.
 Skin Absorption: May be harmful if absorbed through the skin.

Serious eye damage/eye irritation

Eye Contact: May cause eye irritation.
 Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
 Ingestion: Harmful if swallowed.

Respiratory sensitization

Not available.

Skin sensitization

Not available.

Germ cell mutagenicity

Not available.

Carcinogenicity

Not available.

Specific target organ toxicity - single exposure

Not available.

Specific target organ toxicity - repeated exposure

Not available.

Aspiration hazard

Not available.

Section 12. Ecological information**12.1 Toxicity****Aquatic toxicity****Components****Species****Test Results****Ethanol (CAS 64-17-5)****Aquatic**

Crustacea	EC50	Water flea (Daphnia magna)	7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Cyclohexanone (CAS 108-94-1)			
Daphnia and other aquatic invertebrates	LC50	Daphnia magna (Water flea)	820 mg/l - 24 h
Acetone (CAS 67-64-1)			
Fish	LC50	Oncorhynchus mykiss (rainbow trout)	5.540 mg/l - 96 h
Daphnia and other aquatic invertebrates	LC50	Daphnia magna (Water flea)	8,800 mg/l - 48 h
1-methoxy-2-propanol (CAS 107-98-2)			
Fish	LC50	Oncorhynchus mykiss (rainbow trout)	>1000 mg/l - 96 h
12.2 Persistence and degradability	Not available.		
12.3 Bioaccumulative potential	Not available.		
12.4 Mobility in soil	Not available.		
12.5 Results of PBT and vPvB assessment	Not available.		
12.6 Other adverse effects	Not available.		
Section 13. Disposal considerations			
13.1 Waste treatment methods	This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.		
Sewage disposal-relevant information	Do not empty into drains.		
Contaminated packaging	Not available.		
13.2 Relevant provisions relating to waste	The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.		
13.3 Remarks	Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.		
Section 14. Transport information			
14.1 UN number	UN1210		
14.2 UN proper shipping name Hazardous ingredients	Printing ink, flammable (Ethanol, Cyclohexanone, Acetone, 1-methoxy-2-propanol)		

14.3 Transport hazard class(es)



Class 3 (flammable liquids)

14.4 Packing group

II

14.5 Environmental hazards

none (non-environmentally hazardous acc. to the dangerous goods regulations)

14.6 Special precautions for user

DOT Classification only applies to shipments within the US and Puerto Rico.

14.7 Transport in bulk according to

Not applicable

Annex II of MARPOL and the IBC

Code

14.8 Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number

UN1210

UN proper shipping name

Printing ink

Transport hazard class(es)

Classes: 3 Flammable liquid
Label :3

Packing group

II

Danger labels



• International Maritime Dangerous Goods Code (IMDG)

UN number

UN1210

UN proper shipping name

Printing ink

Transport hazard class(es)

Classes: 3 Flammable liquid
Label :3

Packing group

II

Danger labels



• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number

UN1210

UN proper shipping name

Printing ink

Transport hazard class(es)

Classes: 3 Flammable liquid
Label :3

Packing group

II

Danger labels



Section 15 - Regulatory Information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (as amended).

Guidance

Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16 - Other Information

Issue date

16-October-2018

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17-May-2021

Version #

4.2

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