

SAFETY DATA SHEET

According to 1907/2006/EC (REACH), 453/2010 (EC), 1272/2008/EC (CLP)
and OSHA GHS

1 – Identification

Product identifier	SoluJET®2780K
Other means of identification	Not available.
Synonym(s)	SoluJET®2780K black solvent- based ink
Recommended use	Inkjet Printing
Recommended restrictions	None Known.
Issue date	16-Oct-2018
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

2 - Hazard(s) identification

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

Physical hazard Flammable liquids. Category 2, H225

Health hazards Serious eye damage (Category 1), H318
Mild skin irritation (category 3), H316

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



GHS02 GHS05

GHS signal word Danger

GHS hazard statement H225- Highly flammable liquid and vapor.
H316- Causes mild skin irritation.

H318- Causes serious eye damage.

GHS Precautionary

statement

Prevention

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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.

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage

P403 + P235 - Store in a well-ventilated place. Keep cool.

Disposal

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

Environmental hazards

Not available

Additional information:

EUH209 Can become highly flammable in use.
EUH210 Safety data sheet available on request.

3 - Composition/information on ingredients

Hazardous Components (Chemical Name)/ REACH Registration No.	CAS Number	%	EC No./ EC index No	GHS 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; STOT SE 3; H226, H336
Cyclohexanone	108-94-1	<5	20203-631-1 606-010-00-7	Flam. Liq. 3, H226 Acute Tox. 4, H302, H332 Skin Irrit. 2, H315

Acetone	67-64-1	<5	200-662-2 606-001-00-8	Eye Dam. 1, H318 Flam. Liq. 1: H224 Eye Irrit. 2: H319 STOT SE 3: H336
Black dyes mixture	Proprietary	<10	NA	Not classified
4. 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.			
Most important symptoms/ effects, acute and delayed	See section 8.			
5. Fire-fighting measures				
FLASH POINT:	16°C (closed-cup).			
Suitable extinguishing media	Suitable extinguishing media: sand, carbon dioxide (CO2) or dry chemical.			
Unsuitable extinguishing media	Not available.			
Specific hazards arising from the chemical	Not applicable.			
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.			

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up

Not available.

7. Handling and storage

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.

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.



8. Exposure controls/personal protection

Occupational exposure limits

Component	CAS	US	EU	UK
Ethanol	64-17-5	1000 ppm TWA OSHA PEL 1000 ppm STEL ACGIH TLV	None Established	1000 ppm TWA
Cyclohexanone	108-94-1	1000 ppm TWA OSHA PEL	None Established	None Established
Acetone	67-64-1	590 mg/m ³ TWA OSHA PEL 750 ppm STEL ACGIH TLV	None Established	590 mg/m ³ TWA, 750 ppm STEL
1-methoxy-2-propanol	107-98-2	None: TWA OSHA PEL 150ppm, 553mg/m ³ STEL ACGIH TLV	375mg/m ³ TWA 568mg/m ³ STEL	375mg/m ³ TWA 150ppm STEL

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering Controls	Not available.
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. Launder contaminated clothing before reuse.

9. 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.

10. Stability and reactivity

Reactivity Not available.

Chemical stability Stable at normal conditions.

Possibility of hazardous reactions None known.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Not available.

Hazardous decomposition products Not available.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity value

Components	Species	Test results
Ethanol (CAS 64-17-5)		
Acute		
Inhalation		
LC50	Mouse Rat	39 mg/l, 4 Hours 20000 mg/l, 10 Hours
Oral		
LD50	Dog Guinea pig Mouse Rat	5.5 g/kg 5.6 g/kg Mouse 3450 mg/kg Rat 7060 mg/kg 6.2 g/kg
Other		
LD50	Mouse Rat	933 mg/kg 1440 mg/kg
Cyclohexanone (CAS 108-94-1)		
Acute		
Inhalation		
LC50	Rat	> 6.2 mg/l, 4 Hours
Dermal		
LD50	rabbit	3,160 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

LC50 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 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.

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

- single exposure

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

- repeated exposure

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

12. Ecological information

Aquatic toxicity

Eco toxicity



Components	Species	Test Results
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Ethanol

(CAS 64-17-5)

Aquatic

Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	> 100 mg/l, 96 hours
Cyclohexanone			
(CAS 108-94-1)			
Daphnia and other aquatic invertebrates	LC50	<i>Daphnia magna</i> (Water flea)	820 mg/l - 24 h
Acetone			
(CAS 67-64-1)			
Fish	LC50	<i>Oncorhynchus mykiss</i> (rainbow trout)	5.540 mg/l - 96 h
Daphnia and other aquatic invertebrates	LC50	<i>Daphnia magna</i> (Water flea)	8.800 mg/l - 48 h
Bioaccumulative potential	Not available.		
Partition coefficient n-octanol / water (log Kow)			
Ethanol (CAS 64-17-5)	-0.31		
Cyclohexanone (CAS 108-94-1)	0.81		
Acetone (CAS 67-64-1)	-0.24		
1-methoxy-2-propanol (CAS 107-98-2)	-0.49		
Mobility in soil	Not available.		
Other adverse effects	Not available.		
13. Disposal considerations			
Disposal instructions	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.	
Local disposal regulations	Not available.	
Hazardous waste code	Not regulated.	
Waste from residues / unused products	Not available.	
Contaminated packaging	Not available.	
14. Transport information		
DOT		
UN number	UN1210	
UN proper shipping name	Printing ink, flammable (Ethanol, Cyclohexanone, Acetone, 1-methoxy-2-propanol)	
Transport hazard class(es)		Classes: 3 Flammable liquid Label :3
Subsidiary class(es)	Not available.	
Packing group	II	
Special precautions for user	DOT Classification only applies to shipments within the US and Puerto Rico.	
Labels required	Not available.	
IATA		
UN number	UN1210	
UN proper shipping name	Printing ink, flammable (Ethanol, Cyclohexanone, Acetone, 1-methoxy-2-propanol)	
Transport hazard class(es)		Classes: 3 Flammable liquid Label :3
Subsidiary class(es)	-	
Packaging group	II	
Environmental hazards	No	
Labels required	Not available.	

ERG Code	Not available.	
Special precautions for user	Not available.	
IMDG		
UN number	UN1210	
UN proper shipping name	Printing ink, flammable (Ethanol, Cyclohexanone, Acetone, 1-methoxy-2-propanol)	
Transport hazard class(es)		Classes: 3 Flammable liquid Label :3
Subsidiary class(es)	-	
Packaging group	II	
Environmental hazards		
Marine pollutant	No	
Labels required	Not available.	
Ems	Not available.	
Special precautions for user	Not available.	
Section 15 - Regulatory Information		
US federal regulations	US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not on regulatory list.	
CERCLA Hazardous Substance List (40 CFR 302.4)	1-methoxy-2-propanol (CAS 107-98-2)	
NIOSH-Ca (National Institute for Occupational Safety and Health)	Not on regulatory list.	

Canadian Domestic Substances List (DSL)	Not on regulatory list.
Canadian Ingredient Disclosure list (limit 0.1%)	Ethanol(CAS 64-17-5)
Canadian Ingredient Disclosure list (limit 1%)	Not on regulatory list.
Other regulations, limitations and prohibitive regulations	
Substances of very high concern (SVHC) according to REACH, Article 57	None of the ingredients are listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard – No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No
US state regulations	
US. Massachusetts RTK - Substance List	Ethanol (CAS 64-17-5) Cyclohexanone (CAS 108-94-1) Acetone (CAS 67-64-1) 1-methoxy-2-propanol (CAS 107-98-2)
US. New Jersey Worker and Community Right-to-Know Act	Cyclohexanone (CAS 108-94-1)
US. Pennsylvania RTK - Hazardous Substances	Ethanol (CAS 64-17-5) Cyclohexanone (CAS 108-94-1) Acetone (CAS 67-64-1) 1-methoxy-2-propanol (CAS 107-98-2)
US. Rhode Island RTK	Ethanol (CAS 64-17-5) Cyclohexanone (CAS 108-94-1) Acetone (CAS 67-64-1)

US - California Proposition Not on regulatory list.

**65 - Carcinogens &
Reproductive Toxicity
(CRT): Listed substance**

Section 16 - Other Information

Issue date 16-October-2018

Revision date 12-February-2019

Version # 04

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