

SAFETY DATA SHEET

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

1 – Identification

| | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Product identifier | SoluJET® 2707K |
| Other means of identification | Not available. |
| Synonym(s) | SoluJET® 2707K 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

Health hazards Eye irritation (Category 2), H319
Mild skin irritation (category 3), H316

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



GHS02 GHS07

GHS signal word Danger

| | | | | |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------|-------------------------------------------|
| GHS hazard statement | H225- Highly flammable liquid and vapor. H319- Causes serious eye irritation H316- Causes mild skin irritation | | | |
| 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. | | | |
| Response | 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. 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 | >72 | 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 |

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|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------------------------|----------------------------------------------------------------------------------------------|
| 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 Eye Dam. 1, H318 |
| Acetone | 67-64-1 | <5 | 200-662-2 606-001-00-8 | Flam. Liq. 1: H224 Eye Irrit. 2: H319 STOT SE 3: H336 |
| Black dyes mixture | Proprietary | <8 | 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 - single exposure | Based on available data, the classification criteria are not met. | |
| Specific target organ toxicity - repeated exposure | Based on available data, the classification criteria are not met. | |
| Aspiration hazard | Based on available data, the classification criteria are not met. | |
| 12. Ecological information | | |
| Aquatic toxicity | | |
| Eco 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 |

**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


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|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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) |  <p>Classes: 3 Flammable liquid Label :3</p> |
| Subsidiary class(es) | - |
| Packaging group | II |
| Environmental hazards | No |
| 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 25-January-2019

Version # 03

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