


1 - Identification

Product identifier	Smart-Jet® 82550
Other means of identification	Not available.
Synonym(s)	Not available.
Recommended use	Inkjet Printing
Recommended restrictions	None Known.
Issue date	21-August-2015
Company identification	MSSC, LLC. 926 McDonough Lake Road, Collinsville, IL 62234, USA Tel: 618-343-1006 Website: www.msscllc.com

2 - Hazard(s) identification

Physical hazards	Flammable liquids.	Category 2
Health hazards	Mild skin irritation (category 3), H316 Eye irritation (Category 2), H319	
Label elements		
Signal word	Danger	
Hazard statement	H225- Highly flammable liquid and vapor. H316- Causes mild skin irritation H319- Causes serious eye irritation.	
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

3 - Composition/information on ingredients

Mixtures	CAS Number	%
Ethanol	64-17-5	>85
Cyclohexanone	108-94-1	<5
Invisible dye	Proprietary	<6
Additives	Proprietary	<2

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: 15°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 Avoid contact with skin. Avoid inhalation of vapors or mists.
Do not touch or walk through spilled material. Ensure adequate ventilation.

emergency procedures	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

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm
Cyclohexanone (CAS 108-94-1)	PEL	200mg/m ³ 50ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Cyclohexanone (CAS 108-94-1)	STEL	50ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm
Cyclohexanone (CAS 108-94-1)	TWA	100mg/m ³ 25ppm

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	Not available.
Other	Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.
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	Slight yellow liquid
Odor	Vinous odor
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point;	Not available.
Initial boiling point and boiling range	>70°C
Flash point	15°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
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
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
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Persistence and degradability Not available.

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

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)
Transport hazard class(es)	3
Subsidiary class(es)	Not available.
Packing group	II
Special precautions for user	Passenger aircraft Quantity limitation: 5 L Cargo aircraft Quantity limitation: 60 L
Labels required	Not available.

IATA

UN number	UN1210
UN proper shipping name	Printing ink, flammable (Ethanol, Cyclohexanone)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	No
Labels required	Not available.
ERG Code	Not available.
Special precautions for user	Passenger and Cargo Aircraft Quantity limitation: 5 L Cargo Aircraft Only

Quantity limitation: 60 L
**Limited Quantities -
Passenger Aircraft**
Quantity limitation: 1 L

IMDG

UN number	UN1210
UN proper shipping name	Printing ink, flammable (Ethanol, Cyclohexanone)
Transport hazard class(es)	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)	Not on regulatory list.
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)
US. New Jersey Worker and	Cyclohexanone (CAS 108-94-1)

Community Right-to-Know Act

US. Pennsylvania RTK - Hazardous Substances Ethanol (CAS 64-17-5)
Cyclohexanone (CAS 108-94-1)

US. Rhode Island RTK Ethanol (CAS 64-17-5)
Cyclohexanone (CAS 108-94-1)

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance Not on regulatory list.

Section 16 - Other Information

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