


1 - Identification

Product identifier	Smart-Jet® 80430UV
Other means of identification	Not available
Synonym(s)	Not available
Recommended use	Inkjet Printing
Recommended restrictions	None Known
Issue date	12-October-2016
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	Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Skin sensitization (Category 1), H317	
Label elements		
Signal word	Danger	
Hazard statement	H225- Highly flammable liquid and vapor. H315- Causes skin irritation. H317- May cause an allergic skin reaction. H319- Causes serious eye irritation. H413 May cause long lasting harmful effects to aquatic life.	
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	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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 May cause long lasting harmful effects to aquatic life (category 4)

3 - Composition/information on ingredients

Mixtures

Hazardous components Chemical name	CAS Number	%
Ethanol	64-17-5	<40
1,6-Hexanediol diacrylate	13048-33-4	>20
Acrylic resin	Proprietary	>5
Bis (2,4,6-trimethylbenzoyl)- phenylphosphineoxide	162881-26-7	<7
Colorants	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:	20°C (closed-cup)
Suitable extinguishing media	Suitable extinguishing media: sand, carbon dioxide (CO ₂) 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.
Environmental precautions	Use personal protective equipment to minimize exposure to skin and eye. In the case of vapor formation use a respirator with an approved filter. 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

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm

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	White liquid
Odor	Not available
Odor threshold	Not available
pH	Not available
Melting point/freezing point;	Not available
Initial boiling point and boiling range	>70°C
Flash point	20°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-	Not available

octanol/water

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available

10. Stability and reactivity

Reactivity Not available.

Chemical stability Stable at normal conditions. Keep away from direct sunlight

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

**1,6-Hexanediol diacrylate
(CAS 13048-33-4)**

Inhalation

LC50

Rat-Male and female

0,41 mg/l, 7 Hours

Oral

LD50

Rat

5000 mg/kg

Dermal

LD50

Rabbit

3650 mg/kg

Skin corrosion/irritation

Material name: Smart-Jet® 80430UV

Version #: 03 Issue date: 12-October-2016 Revision date:6-Nov-2018

Skin	Rabbit	Irritating to skin. - 4 h
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: May be 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

Ecotoxicity

Components	Species		Test Results
Ethanol (CAS 64-17-5)			
Aquatic			
Crustacea	EC ₅₀	Water flea (Daphnia magna)	7.7 - 11.2 mg/l, 48 hours
Fish	LC ₅₀	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
1,6-Hexanediol diacrylate (CAS 13048-33-4)			
Fish	LC ₅₀	Fish	10mg/l ,96hr
Crustacea	LC ₅₀	Daphnia magna	2,6mg/l, 48hr
Algæ	EC ₅₀	Green algae	1,5mg/l, 72hr
Bacteria	EC ₅₀	Bacteria	270 mg/l, 30min
Persistence and degradability	Not available.		
Bioaccumulative potential	Not available.		
Partition coefficient n-octanol / water (log Kow)			
Ethanol (CAS 64-17-5)	-0.31		
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)
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 Special provisions 24, IB2, T4, TP1
Labels required	Not available.

IATA

UN number	UN1210
UN proper shipping name	Printing ink, flammable (Ethanol)
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)
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)
US. New Jersey Worker and	Not on regulatory list.

Community Right-to-Know Act

US. Pennsylvania RTK - Hazardous Substances Ethanol (CAS 64-17-5)

US. Rhode Island RTK Ethanol (CAS 64-17-5)

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

Section 16 - Other Information

Issue date 12-October-2016

Revision date 6-November-2018

Version # 03

Disclaimer This Safety Data Sheet document is provided without charge to customers of MSSC,LLC. Data is the most current known to MSSC,LLC at the time of preparation of this document and is believed to be accurate. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.