

1 - Identification

Product identifier	SecuJET® 2550R
Other means of identification	Not available.
Synonym(s)	2550 Solvent based invisible ink
Recommended use	Inkjet Printing
Recommended restrictions	None Known.
Issue date	21-August-2015
Company identification	MYLAN GROUP Long Duc Industrial Park Tra Vinh City, Tra Vinh Province, Vietnam Tel. 84-74-3846-997 Fax 84-74-3846-998

2 - Hazard(s) identification

Classification according to Regulation (EC) No 1272/2008 [CLP]: Flammable liquids. Category 2

Health hazards Not classified.

OSHA hazard(s) Not classified.

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



GHS02

GHS signal word Danger

GHS hazard statement H225- Highly flammable liquid and vapor.

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.
P273 - Avoid release to the environment.
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

	<p>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> <p>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P403 + P235 - Store in a well-ventilated place. Keep cool.</p>			
Response	P501- Dispose of contents/container in accordance with local/regional/national/international regulations.			
Storage				
Disposal				
Hazard(s) not otherwise classified (HNOC)	Not classified.			
Environmental hazards	Hazardous to the aquatic environment, long-term hazard			Category 3
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
Ethyl alcohol	64-17-5	>65	200-578-6 603-002-00-5	Flam. Liq. 2, H225 Eye Irrit. 2, H319
N-Methyl-2-pyrrolidinone	872-50-4	<20	212-828-1 606-021-00-7	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H315, H319, H335, H360D
Invisible dye	Proprietary	<6	NA	Not classified
Additives	Proprietary	<2	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:	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	<p>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.</p> <p>Use personal protective equipment to minimize exposure to skin and eye. In the case of vapor formation use a respirator with an approved filter.</p>	
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	<p>Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product.</p> <p>Use with adequate ventilation.</p> <p>Wear personal protective equipment.</p>	
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
Ethyl alcohol (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm

US. ACGIH Threshold Limit Values

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

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethyl alcohol (CAS 64-17-5)	TWA	1900 mg/m3 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**

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 Slight yellow 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	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 ethyl alcohol.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity (cPs)	1.0 – 2.5
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
Ethyl alcohol (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
N-Methyl-2-pyrrolidinone (CAS 872-50-4)		
Acute		
Oral		
LD50	Rat	3914mg/kg
Dermal		
LD50	Rabbit	8 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
Ethyl alcohol (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
N-Methyl-2-pyrrolidinone (CAS 872-50-4)			
Aquatic			
Fish	LC50	other fish	4.000 mg/l - 96 h
	LC50	Leuciscus idus (Golden orfe)	500 mg/l - 96 h
Daphnia and other aquatic invertebrates	EC50	Daphnia magna (Water flea)	1.000 mg/l - 24 h
Bacteria	LC50	Bacteria	9.000 mg/l
Persistence and degradability	Result: 90 - 100 % - Readily biodegradable		
Bioaccumulative potential	Not available.		
Partition coefficient n-octanol / water (log Kow)			
Ethyl alcohol (CAS 64-17-5)	-0.31		
N-Methyl-2-pyrrolidinone (CAS 872-50-4)	-0.46		
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 (Ethyl alcohol, N-methyl-2-pyrrolidone)		

Transport hazard class(es)		Classes: 3 Flammable liquid Label :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 (Ethyl alcohol, N-methyl-2-pyrrolidone)	
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	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 (Ethyl alcohol, N-methyl-2-pyrrolidone)	
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)	Not on regulatory list.
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%)	Ethyl alcohol (CAS 64-17-5)
Canadian Ingredient Disclosure list (limit 1%)	Not on regulatory list.
Other regulations, limitations and prohibitive regulations	Not on regulatory list.
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 Ethyl alcohol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act Not on regulatory list

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

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

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

Section 16 - Other Information

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