

MATERIAL SAFETY DATA SHEET

Image Guard™
 Date Issued: June, 2010
 Revision: 2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Image Guard™
 General Use: Spray varnish sealer for ink jet prints
 Product Description: Aerosol spray sealer
 Manufacturer: **Ink2image,**
 4338 Regency Drive,
 Glenview, IL 60025
 USA
 TELEPHONE No. : +1 847 827 0747

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	% Wt.	CAS No.	EEC No.	Symbol	R	EXPOSURE LIMITS			
						Long Term (8Hr)		Short Term (15 mins)	
						ppm	mg/m ³	ppm	mg/m ³
Isopropyl Alcohol	40-60	67-63-0	200-661-7	F	11, 36, 67	400	999	500	1250
Dimethyl Ether	40-60	115-10-6	204-065-8	F+	12	400	766	500	958
n-Butyl Acetate	1-3	123-86-4	204-658-1	-	10, 66, 67	150	742	200	966

Remaining ingredients not considered hazardous under CHIP regulations

3. HAZARDS IDENTIFICATION

Extremely Flammable. Vapour harmful. The principal safety and health hazards when using the product are due to inhalation of isopropanol vapors. There is also a risk of ignition of the spray should it pass through or on an ignition source. Inhalation may occur while spraying the product or during the drying process. If the product is used with adequate ventilation, risk of excessive inhalation is eliminated.

4. FIRST AID MEASURES

- ◆ **EYES** : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
- ◆ **SKIN** : Wash with soap and water. Get medical attention if irritation or rash develops. Remove and launder contaminated clothing before reuse.
- ◆ **INGESTION**: If fully conscious, drink plenty of water. Induce vomiting. Get medical attention.
- ◆ **INHALATION**: Remove to fresh air. If not breathing, apply artificial respiration. Get immediate medical attention
- ◆ **ADVICE TO PHYSICIAN** : Treat symptoms.

5. FIRE FIGHTING MEASURES

- ◆ **EXTINGUISHING MEDIA**: Dry chemical, carbon dioxide, foam for alcohols, water fog/ spray.
- ◆ **FIRE/EXPLOSION HAZARDS**: Containers are under pressure. Exposure to high heat may result in explosion.
- ◆ **FIRE FIGHTING MEASURES**: Wear a self-contained breathing apparatus and full protective gear. Cool cans with water.
- ◆ **NFPA HAZARD CODES**: Health/Flammability/Reactivity 2 4 1

6. ACCIDENTAL RELEASE MEASURES

Evacuate area. Provide adequate ventilation. Contain spill to a small area. Flush away from ignition sources with water. Pick up with absorbent material and transfer to suitable container for disposal. Keep out of sewers, streams and waterways.

7. HANDLING AND STORAGE

Do not puncture or crush container, even when empty. Keep away from open flames and sparks.
 Store above 0°C (32°F) and below 49°C (120°F). Do not store in direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- ◆ **ENGINEERING CONTROLS**: Good general ventilation should be sufficient to control airborne levels. Use a fume hood if PEL/TLV may be exceeded.
- ◆ **PERSONAL PROTECTION**
- ◆ **RESPIRATORY PROTECTION**: For most conditions no respiratory protection should be needed. If Exposure limit is exceeded, wear an approved organic respirator.
- ◆ **PROTECTIVE GLOVES**: Not normally required. Wear chemical resistant gloves, if skin contact may occur.
- ◆ **EYE PROTECTION**: Wear safety glasses or goggles.

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9. PHYSICAL AND CHEMICAL PROPERTIES

- ◆ PHYSICAL STATE: Clear low viscosity liquid with an alcohol odor.
- ◆ BOILING POINT: 82.5°C (181°F) (Isopropanol)
- ◆ FLASH POINT: 12°C (53°F) open cup (Product only)
- ◆ AUTOIGNITION TEMP.: not determined
- ◆ VAPOUR PRESSURE: not determined
- ◆ SOLUBILITY IN WATER: Miscible
- ◆ FREEZING POINT: Less than 0°C
- ◆ SPECIFIC GRAVITY: 0.78 kg/l
- ◆ pH: Not applicable
- ◆ VAPOUR DENSITY: >1 (Air = 1)
- ◆ EVAPORATION RATE: <1 (Ether#1)
- ◆ % VOLATILE (BY VOLUME) 90
- ◆ FLAMMABLE LIMITS: Lower: 2.0 Upper: 12.7 (Isopropanol)

10. STABILITY AND REACTIVITY

- ◆ **STABLE:** Yes
- ◆ **INCOMPATIBILITY:** Strong Oxidizers, strong inorganic acids.
- ◆ **HAZARDOUS DECOMPOSITION PRODUCTS:** May include oxides of carbon, nitrogen and other toxic fumes.
- ◆ **HAZARDOUS POLYMERISATION:** Will not occur.

11. TOXICOLOGICAL INFORMATION

- ◆ **PRIMARY ROUTE OF EXPOSURE:** Inhalation, skin and eye contact
- ◆ **ACUTE EFFECTS:**
- ◆ **EYES:** Eye contact may cause irritation.
- ◆ **INHALATION:** Inhalation in excess of PEL/TLV may result in dizziness and headache and in extreme cases, loss of consciousness.
- ◆ **SKIN:** Repeated or prolonged skin contact may cause skin irritation and defat the skin.
- ◆ **CHRONIC EFFECTS:** None expected from available data.
- ◆ **CANCER INFORMATION:** This product contains no ingredient that is listed on the **IARC**, **NTP**, or **OSHA** carcinogen lists.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Do not incinerate. Bury in licensed facility. Follow Federal, State, and local regulations.

14. TRANSPORTATION INFORMATION

- ◆ **TDG:** Aerosol, 2.1, UN1950 **IMDG:** Aerosols, Class 2, UN1950, ERG No.12
- ◆ **IATA/CAO:** Aerosols, Flammable, N.O.S., UN 1950
- ◆ **ARD/RID:** Aerosol Dispensers, 2, 5°F ARD.UN1950
- ◆ **U.S. DOT:** Consumer Commodity ORM-D for package weights more than 30 Kg. - Aerosols, Flammable, N.O.S., UN

15. REGULATORY INFORMATION

- ◆ **EUROPEAN CLASSIFICATION:** F+, Extremely flammable; R-Phrase - Extremely flammable; S-Phrase - keep away from ignition sources, no smoking.
- ◆ **CANADIAN CLASSIFICATION:** B-2: Flammable aerosol; R-Phrase - Flammable; S-Phrases - keep away from sources of ignition, no smoking; Do not breathe spray; Use only in well ventilated areas.

16. OTHER INFORMATION

- ◆ **HMIS Rating :** Health : 2 Flammability : 4 Reactivity : 1
- ◆ **CERCLA/SUPERFUND, 40 CFR 302.4:** Dimethyl Ether is reportable, 100 lbs (45.4 kg.).
- ◆ **TOXIC SUBSTANCES CONTROL ACT (TSCA) :** The ingredients of this product are all on the TSCA inventory list.
- ◆ **SARA TITLE III, 313 CHEMICALS:** None
- ◆ **CALIFORNIA PROPOSITION 65:** This product contains no chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

This information is based solely on the data provided by the suppliers of the materials used and/or recognized technical sources, not on the mixture itself and is believed to be correct as of this date. No warranty is expressed or implied regarding the accuracy of the data.