

SAFETY DATA SHEET

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1.

IDENTIFICATION

Product Identifier: Jet Spray Yellow JS-22
 Product Use: Printing Ink
 Manufactured for: American Marking, Inc.
 2435 Vale Drive
 Birmingham, AL 35244

Product Identification # (PIF): 09813
 Emergency Telephone #: 1-800-255-3924 ChemTel
 General Information #: 205-987-0151
 Date Prepared: August 3, 2015

SECTION 2.

HAZARD(S) IDENTIFICATION

GHS Hazard Codification:



Signal Word: DANGER

| Hazard Class | Category | Code | Hazard Statement |
|--|----------|------|---|
| Flammable Liquid | 2 | H225 | Highly flammable liquid and vapor |
| Acute Toxicity, Dermal | 5 | H313 | May be harmful in contact with skin |
| Skin Irritation | 3 | H316 | Cause mild skin irritation |
| Skin Sensitization | 1 | H317 | May cause an allergic skin reaction |
| Eye Irritation | 2A | H319 | Causes serious eye irritation |
| STOT, SE; Respiratory Tract Irritation | 3 | H335 | May cause respiratory irritation |
| STOT, SE; Narcotic Effects | 3 | H336 | May cause drowsiness or dizziness |
| STOT, Repeated Exposure | 2 | H373 | May cause damage to organs through prolonged or repeated exposure |

| Precautionary | Code | Statement |
|---------------|---|--|
| Prevention | P210 P233 P240 P241 P242 P243 P260 P271 P272 P264 P280 | Keep away from heat/sparks/open flames/hot surfaces – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe fumes/mists/vapors/sprays. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. |
| Response | P303+P361+P353 P352 P333+P313 P321 P363 P304+P340 P312 P305+P351+P338 P337+P313 P332+P313 P370+P378 | IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatments: See Section 4 First Aid Measures of SDS. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. If eye irritation persists: Get medical advice/attention. If skin irritation occurs: Get medical attention/advice. In case of fire: Use Foam, dry chemical, carbon dioxide fire extinguishers, water fog or spray for extinction. |
| Storage | P403+P233+P235 P405 | Store in a well ventilated place. Keep container tightly closed. Keep Cool. Store locked up. |
| Disposal | P501 | Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations. |

Description of any hazards not otherwise classified: May cause chemical conjunctivitis and corneal damage to eyes. May cause cyanosis of the extremities. May be absorbed through the skin and produce toxic effects such as central nervous system depression. Ingestion may cause gastrointestinal tract irritation, nausea, vomiting, diarrhea, central nervous system depression and toxicity with acidosis. May cause CNS depression, collapse, unconsciousness, coma and possible death from respiratory failure.

SECTION 3.

COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | Common Name | CAS # | Concentration Range % |
|------------------------|-------------|-------------|-----------------------|
| Ethyl alcohol | Ethanol | 64-17-5 | 39 – 43 |
| Fumaric modified resin | None | Proprietary | 33 – 37 |

| | | | |
|----------------------|-----------------------------------|----------|-------|
| n-Propyl acetate | Propyl ester acetic acid | 109-60-4 | 4 – 8 |
| 1-Methoxy-2-propanol | Propylene glycol monomethyl ether | 107-98-2 | 3 – 7 |
| Ethyl Acetate | Ethyl ester acetic acid | 141-78-6 | 1 – 3 |

SECTION 4. FIRST AID MEASURES

- **Eyes:** Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention.
- **Skin:** Wash well with soap and water. Remove contaminated clothing and launder before reuse. If irritation or rash develops and persists, seek medical attention. Contaminated work clothing should not be allowed out of the workplace.
- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Call a physician.
- **Ingestion:** DO NOT INDUCE VOMITING. Call a physician immediately. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

SECTION 5. FIRE-FIGHTING MEASURES

Flammability: Class IB Flammable Liquid

Flash Point: 55°F (13°C)

- **Extinguishing Media:** Foam, dry chemical, carbon dioxide fire extinguishers, water spray. Do not spray water directly on fire. Use water spray to cool containers.
- **Specific hazards arising from chemical:** Vapors are heavier than air and may travel along the ground to an ignition source. Readily ignited by static discharge.
- **Hazardous combustion products:** Carbon monoxide and carbon dioxide.
- **Firefighting protective equipment:** Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.
- **Sensitivity to static discharge:** This product is flammable and readily ignited even by static discharge. Grounding equipment is recommended.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment (Section 8). Eliminate all ignition sources. Ventilate area. Do not breathe fumes/mists/vapors/sprays. Contaminated work clothing should not be allowed out of the workplace.

- **For Small Spills:** Spilled material may be slippery. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Vapor-suppressing foam may be used to reduce vapors. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste with non-sparking tools. Wash walking surfaces with water to reduce slipping hazard. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.
- **For Large Spills:** Large spills cannot occur due to packaging.

SECTION 7. HANDLING AND STORAGE

- **Handling:** Wear personal protection equipment (Section 8). Use only outdoors or in a well-ventilated area. Do not breathe fumes/mists/vapors/sprays. Do not handle around sources of ignition. Use proper bonding and grounding during product transfer as described in document NFPA 77. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against static discharge. Vapors are heavier than air and may travel along the ground to an ignition source. Never use welding or cutting torch on or near drum (even empty) because product can ignite explosively. Do not premix with other chemicals. Do not eat, drink or smoke in work areas. Wash thoroughly after handling.
- **Storage:** Keep away from heat, flame, or sunlight. Keep from freezing. Keep container tightly closed when not in use. Store in a well-ventilated place. Keep cool. Store locked up. Protect from physical damage. Store away from oxidizing agents.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Ingredient | CAS # | OSHA/PEL | ACGIH/TLV | STEL |
|------------------------|-------------|----------------|----------------|----------------|
| Ethanol | 64-17-5 | 1000ppm | 1000ppm | Not determined |
| Fumaric modified resin | Proprietary | Not determined | Not determined | Not determined |
| n-Propyl Acetate | 109-60-4 | 200ppm | 200ppm | 250ppm |
| 1-Methoxy-2-propanol | 107-98-2 | Not determined | 100ppm | 150ppm |
| Ethyl acetate | 141-78-6 | 400ppm | 400ppm | Not determined |

Engineering Controls: Provide adequate ventilation. Observe occupational exposure limits and keep the risk of exposure to a minimum.

Personal protective equipment:

- **Eye:** Safety glasses with side shields or splash proof goggles.
- **Skin:** Chemical resistant gloves. Normal materials handling clothing.
- **Respirator:** Use NIOSH approved protection if PEL is exceeded, or if vapors are causing irritation.
- **Other:** Use only in a well ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------|-----------------------|---------------------------------|-----------------|
| Appearance | Yellow, opaque liquid | Upper/Lower flammability limits | Not determined |
| Odor | Alcohol | Vapor pressure | >0.1mmHg @ 20°C |
| Odor threshold | Not determined | Vapor density (Air = 1) | >1 |
| pH | Not determined | Specific gravity (water = 1.0) | 0.960 g/ml |
| Melting point | Not determined | Solubility | Negligible |

| | | | |
|--------------------------------------|--------------------|---|-----------------|
| Freezing point | Not determined | Partition coefficient (n-octanol/water) | Not determined |
| Boiling point | Not determined | Auto-ignition temperature | Not determined |
| Flash point | 55°F (13°C) | Decomposition temperature | Not determined |
| Evaporation rate (n-butyl acetate=1) | Not determined | Viscosity (#2 Zahn @ 72F) | 15 – 18 seconds |
| Flammability | Class IB Flammable | %Volatile/Volume | 89 |

SECTION 10. STABILITY AND REACTIVITY

- Reactivity: Not reactive under normal conditions.
- Chemical stability: Stable under normal, ambient temperature and conditions.
- Possibility of hazardous reactions: Hazardous polymerization will not occur.
- Conditions to avoid: Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals
- Incompatible materials: Avoid oxidizing agents.
- Hazardous combustion products: Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity (short and long term):

- Oral (LD50 Rat): >5000mg/kg
- Dermal (LD50 Rabbit): 20mg/24H
- Inhalation (LC50 Rat): >20mg/kg vapors
- Eye Contact: Causes severe eye irritation. May cause chemical conjunctivitis and corneal damage.
- Skin Contact: Causes moderate skin irritation. May cause cyanosis of the extremities. May be absorbed through the skin and produce toxic effects such as central nervous system depression.
- Inhalation: High concentrations may cause CNS depression, respiratory tract irritation and narcotic effects.
- Ingestion: Ingestion may cause gastrointestinal tract irritation, nausea, vomiting, diarrhea, central nervous system depression and toxicity with acidosis. May cause CNS depression, collapse, unconsciousness, coma and possible death from respiratory failure.
- NTP/IARC/OSHA Carcinogen: Isopropyl alcohol (IARC)

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Effects:

- 96h LC-50 (fish): >100ppm
- 96h EC-50 (invertebrates): >100ppm
- 48h LC-50 (algae): Not determined
- Persistence and degradability: Ethanol, n-Propyl alcohol and 1-Methoxy-2-propanol expected to be readily biodegradable.
- Bioaccumulation: No data available.
- Mobility: This product floats on water. This product is volatile and may spread in the atmosphere. Soil mobility not determined.

SECTION 13. DISPOSAL CONSIDERATIONS

- Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations.
- Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.
- RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) and U112 (Ethyl Acetate) (40 CFR 261.22).

SECTION 14. TRANSPORT INFORMATION

United States DOT:

- UN/ID No.: UN1210
- Proper Shipping Name: Printing Ink, (Ethanol, n-Propyl Acetate, 1-Methoxy-2-propanol, Ethyl Acetate)
- Hazard Class: 3
- Packing Group: II
- 49 CFR §173.154 (b) (2) (Exemption): This product can ship as "Limited Quantity" in inner packaging not over 0.3 gallons. (Non Hazardous)

IMDG & IATA:

- UN/ID No.: UN1210
- Proper Shipping Name: Printing Ink, (Ethanol, n-Propyl Acetate, 1-Methoxy-2-propanol, Ethyl Acetate)
- Hazard Class: 3
- Packing Group: II
- IMDG: Location B
- IATA_P: Quantity limitations, passenger = 5L
- IATA_C: Quantity limitations, cargo =60L
- Marine Pollutant (IMDG Code): No
- Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.

SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.

SARA TITLE III Section 311/312:

| | | | |
|--------------------------|-----|-----------------|-----|
| Immediate (Acute) Health | Yes | Fire Hazard | Yes |
| Delayed (Chronic) Health | Yes | Reactive Hazard | No |

SARA Title 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels (40 CFR 372).

CERCLA: Ethyl acetate (CAS# 141-78-6) has a reportable quantity of 5,000 lbs. at 100% concentration, however, this product is not considered a Hazardous Substance since the quantity does not equal or exceed the RQ in one package (49 CFR 171.8, definition of "Hazardous Substance").

United States Right-To-Know: Ethanol CAS# 64-17-5 - California, New Jersey, Pennsylvania, Minnesota and Massachusetts. n-Propyl Acetate CAS# 109-60-4 – Massachusetts, Minnesota, New Jersey, Pennsylvania. 1-Methoxy-2-propanol CAS# 107-98-2 – Massachusetts, New Jersey, Pennsylvania. Ethyl acetate CAS# 141-78-6 – Massachusetts, Minnesota, New Jersey, Pennsylvania and Rhode Island.

Proposition 65: This material contains the following ingredients for which the state of California has found to cause cancer, birth defects or other reproductive harm: Ethanol CAS# 64-17-5.

RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) and U112 (Ethyl Acetate) (40 CFR 261.22).

SECTION 16. OTHER INFORMATION

- Date Prepared: August 3, 2015
- Hazard Ratings (HMIS): Health 2, Flammability 3, Reactivity 0 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.
- Product VOC: 89%
- Carefully read all instructions on label before handling this product.
- Keep out of reach of children.
- "FOR INDUSTRIAL USE ONLY"

| Abbreviation | Full Name/Explanation |
|--------------|---|
| ACGIH | American Conference of Government Industrial Hygienists |
| CAS | Chemical Abstract Service |
| CERCLA | Comprehensive Environmental Response Compensation and Liability Act |
| CNS | Central Nervous System |
| CFR | Code of Federal Regulations |
| DOT | Department of Transportation |
| EC | Effective Concentration |
| HMIS | Hazardous Material Information System |
| LC | Lethal Concentration |
| LD | Lethal Dose |
| NA | Not Applicable |
| ND | Not Determined |
| NE | Not Established |
| NIOSH | National Institute for Occupational Safety and Health |
| OSHA | Occupational Safety and Health Administration |
| PEL | Permissible Exposure Limit |
| RCRA | Resource Conservation Recovery Act |
| SARA | Superfund Amendments and Reauthorization Act |
| STEL | Short-Term Exposure Limit |
| TLV | Threshold Limit Value |
| TSCA | Toxic Substance Control Act |
| VOC | Volatile Organic Compounds |

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.

Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.

SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.