MATERIAL SAFETY DATA SHEET

in accordance with ANSI Z400.1-2004



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| Product Id: Product Name: | 83Y3968 ORANGE M20 PVC DISP | |
|--|--|--|
| CAS Number: Application: | Mixture FOR INDUSTRIAL USE ONLY! | |
| Supplied By: | Penn Color, Inc. 400 Old Dublin Pike Doylestown, PA 18901 | |
| Telephone: | 215-997-2221 | |
| Facsimilie: | 215-822-5801 | |
| 24 Hour Emergency Telephone: Chemtrec: 1-800-424-9300 | | |
| E-Mail: | msds@penncolor.com | |
| Prepared By: | Regulatory Affairs | |
| | 2. HAZARDS IDENTIFICATION | |
| Eye Contact: Ingestion: Inhalation: Skin Contact: | May cause irritation. May be harmful if swallowed. May be irritating to the respiratory system. May cause irritation. | |
| | MATION ON HAZADDOLIC INCOEDIENTS | |

3. INFORMATION ON HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS

| Component: | CAS #: | Weight %: |
|-----------------------|-------------|------------|
| Phthalate Plasticizer | Proprietary | 10 to < 20 |

| 4. FIRST AID MEASURES | | |
|------------------------|--|--|
| | | |
| Eye Contact: | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. | |
| | If eye irritation persists, consult a physician. | |
| Ingestion: | Do not induce vomiting. Never give anything by mouth to an unconscious person. | |
| 5 | Consult a physician. | |
| Inhalation: | Remove to fresh air. Consult a physician. | |
| Skin Contact: | Wash affected area. | |
| Aggravated Conditions: | No data available. | |

5. FIRE FIGHTING MEASURES

Flash Point Method: Suitable Extinguishing Media: Specific Hazards: Special Protective Equipment for Firefighters: Not applicable. Use dry chemical, CO2, water spray or "alcohol" foam. Keep away from heat and sources of ignition. Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Environmental Precautions: Procedure for Cleaning/Absorption:

Follow your internal emergency response plan. Follow your internal emergency response plan. Follow your internal emergency response plan.

7. HANDLING AND STORAGE

Handling: Storage: Handle in accordance with good industrial hygiene and safety practice. Keep in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS

| Component: | CAS #: | Weight %: | OSHA PEL: | OSHA STEL: | ACGIH TLV: | ACGIH STEL: |
|-----------------------|-------------|-------------|--------------|---------------|---------------|----------------|
| Phthalate Plasticizer | Proprietary | 10 to < 20 | None | None | None | None |

| Engineering Controls: | Use only in area provided with appropriate exhaust ventilation. |
|--------------------------------|---|
| Respiratory Protection: | In case of insufficient ventilation, wear NIOSH-Approved respiratory equipment. |
| Gloves Protection: | Wear appropriate protective gloves. |
| Eyes Protection: | Wear appropriate eye protection. |
| Skin and Body Protection: | Body protection as necessary to prevent skin contact. |
| Hygiene Measures: | Handle in accordance with good industrial hygiene and safety practice. |

HMIS Classification:

| HEALTH: | 1 |
|----------------------|---|
| FLAMMABILITY: | 1 |
| REACTIVITY: | 0 |
| PERSONAL PROTECTION: | X |

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Physical State:

pH: Solubility: Solubility in Other Solvents: Partition coefficient (n-octanol/water) Orange Solid

No data available. No data available. No data available. No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Bulk Density (g/cc): Specific Gravity:

Boiling Point (° C): **Freezing Point** (° C):

VOC Content (%): Vapor Pressure: Vapor Density: Evaporation Rate:

Flammability (solid, gas): Flash Point Method:

Oxidising properties

Explosive properties

Viscosity: Units: Viscosity Method: Spindle Size: Spindle Speed (rpm): No data available. Not applicable.

Not applicable. Not applicable

0 Not applicable. Not applicable. Not applicable.

No data available. Not applicable.

No data available.

No data available.

Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

10. STABILITY AND REACTIVITY

| Stability: Polymerization: Conditions to Avoid: | Stable under recommended storage conditions. Will not occur. Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation, freezing temperatures. |
|---|---|
| Materials to Avoid: | No data available. |
| Hazardous Decomposition | Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, and other toxic compounds. |
| Products: | Information supplied to Penn Color indicates that diarylide pigments in polymers can decompose at temperatures above 200° C to produce trace amounts of 3,3' Dichlorobenzidine. The amount and species of degradation products formed depends on the temperature, dwell time, formulation and processing conditions of the product. |

11. TOXICOLOGICAL INFORMATION

Product Information:

This product has not undergone any toxicological studies.

Component Information:

HAZARDOUS COMPONENTS

| Component: | Dose / Concentration: | Exposure Route: | Test Species: | Target Organs: |
|-----------------------|-------------------------------|------------------------------|------------------|----------------|
| Phthalate Plasticizer | > 4.4 mg/L 4h > 9750 mg/kg | Inhalation LC50 Oral LD50 | Rat | |

Other Information:

Other:

No data available.

12. ECOLOGICAL INFORMATION

Product Information:

Ecotoxicological Information:

This product has not undergone any ecotoxicological studies.

Chemical Fate Information:

This product has not undergone any chemical fate studies.

Component Information:

HAZARDOUS COMPONENTS

| Component: | Dose: | Time: | Test Species: |
|-----------------------|--------------|------------------------|---------------------|
| Phthalate Plasticizer | > 0.14 mg/L | 96 h LC50 flow-through | Lepomis macrochirus |
| | > 0.17 mg/L | 96 h LC50 static | Pimephales promelas |
| | > 0.19 mg/L | 96 h LC50 flow-through | Lepomis macrochirus |
| | > 100 mg/L | 96 h LC50 semi-static | Brachydanio rerio |
| | > 500 mg/L | | Leuciscus idus |

13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Dispose of in accordance with all federal, state, and local regulations.

EEC Waste Code:

Not determined.

| Origin: | Not determined. |
|--------------|---------------------------|
| | 14. TRANSPORT INFORMATION |
| USDOT: | |
| Status: | Not regulated. |
| ICAO / IATA: | |
| Status: | Not regulated. |
| <u>IMO:</u> | |
| Status: | Not regulated. |

International Regulatory Rules:

International Agency for Research of Cancer:

No component of this product is included on an IARC list.

U.S. Regulatory Rules:

SARA 313:

Metal data for our preparations are being migrated from different sources to our compliance software. The intent of this migration is to provide the end user with the appropriate data to complete the necessary reporting required by the SARA 313 program. Until this migration is finished, the data shown here maybe incomplete. If you need to this data for reporting, please confirm its completion status with Regulatory Affairs.

Miscellaneous Programs:

State Regulatory Rules:

15. REGULATORY INFORMATION

TPCH CSG Status:

No data available.

Canadian Regulatory Rules:

Inventories:

The are many reasons that a chemical preparation may not be compliant with a particular chemical inventory. If the preparation is not compliant with a national chemical inventory shown below or the national chemical inventory of interest is not shown, please contact Regualtory Affairs for information regarding your specific need.

| Canada: | All of the ingredients are listed on or compliant with the DSL or NDSL Inventory. |
|----------------|--|
| Europe: | All of the ingredients are listed on or compliant with the EINECS or ELINCS Inventory. |
| United States: | All of the ingredients are listed on or compliant with the TSCA Inventory. |

| 16. OTHER INFORMATION | | |
|---|---|--|
| Print Date: | 17-Feb-2010 | |
| Revision Number: Revision Date: | N/A | |
| This data sheet contains changes from the previous version in section(s): | None. | |
| Important Note: | This information is supplied and offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications! | |
| Additional Advice: | No data available. | |
| Environmental Program Definitions: | CSG - The Council of State Governments SARA - Superfund Ammendments and Reauthorization Act TPCH - The Toxics in Packaging Clearinghouse WHMIS - Workplace Hazardous Materials Information System | |
| Dec. dec. 4 J.J. 023/20/0 | Dage 6/8 | |

16. OTHER INFORMATION

| Inventory Definitions: | DSL - Canadian Domestic Substances List NDSL - Canadian Non-Domestic Substances List EINECS - European Inventory of Existing Chemical Substances ELINCS - European List of Notified Chemical Substances TSCA - United States Toxic Substances Control Act |
|--|---|
| Occupational Exposure Definitions: | ACGIH - American Conference of Governmental Industrial Hygenists. CNS - Central Nervous System GI - Gastrointestinal NIOSH - National Institute for Occupational Safety and Health - United States OEL - Occupational Exposure Limits - France, Germany, Poland, Sweden OSHA - Occupational Safety and Health Administration PEL - Permissible Exposure Limit - United States STEL - Short Term Exposure Limit - United Kingdom and United States TLV - Threshold Limit Value - United States TWA - Time Weighted Average - United Kingdom and United States |
| Toxicity Definitions: | LC50 - A LC50 is a calculated concentration of a substance in an air for a specified length of time, which is expected to cause the death of 50% of an entire defined experimental animal population. It is determined from the exposure to the substance of a significant number from that population. LD50 - A LD50 is defined as the calculated dose of a substance in an exposure, other than inhalation for a specified length of time, which is expected to cause the death of 50% of an entire defined experimental animal population. It is determined from the exposure to the substance by any route (other than inhalation) of a significant number from that population. |
| Transportation Definitions: | EmS - Emergency Response Procedures for Ships Carrying Dangerous Goods - IMO IATA - International Air Transport Association ICAO - International Civil Aviation Organization IMDG - International Maritime Dangerous Goods IMO - International Maritime Organization MFAG - Medical First Aid Guide- IMO N.O.S Not Otherwise Specified RQ - Reportable Quantity UN - United Nations USDOT - United States Department of Transportation |
| Weight and Measurement Definitions: | cc - cubic centimeter m ³ - Cubic meters °C - Degrees Celsius g - Grams h - Hour Hr - Hour kg - Kilograms L - Liter m - Meter µL - Microliters mg - Milligram mL - milliliters mPa.s - Millipascal seconds ppb - Parts per billion ppm - Parts per million % - Percentage lb - Pounds rpm - revolutions per minute |

16. OTHER INFORMATION

Miscellaneous Definitions:

CAS - Chemical Abstract System ESIS - European chemical Substances Information System NJTS - New Jersey Trade Secret

End of Safety Data Sheet