MATERIAL SAFETY DATA SHEET

Colors:

Dharma Trading Co 654 Irwin Street San Rafael CA 94901 1, 3, 4, 8, 8A, 9, 10, 10A, 12, 12A, 13, 14A, 15, 17, 18, 18A 19, 20, 22, 24, 26, 27, 31, 33, 34, 35, 35A, 36, 38, 39, 41, 42 44, 45, 46, 48, 49, 56, 57, 60, 61, 64, 65, 67, 70, 75, 76, 77 78, 83, 86, 95, 96, 98, 104, 111, 112, 113, 115, 116, 117, 118 119, 120, 121, 250, 300 24 Hour Emergency Phones
In U.S. Call CHEMTEL 1-800-255-3924
Outside U.S. call CHEMTEL Collect at;
1-813-248-0585

HMIS RATINGS:

HEALTH: 2 * FIRE: 1 REACTIVITY: 0 PERSONAL PROTECTION: F

SECTION 1: PRODUCT IDENTIFICATION

Product I.D.:

50908652

Product Name:

MX

Product Description:

Reactive Colorant Powder

Chemical Family:

Azo reactive dye

Effective Date:

November 27, 2006

SECTION 2: OSHA HAZARDOUS INGREDIENTS

Component	CAS Number	Wt %	OSHA - PEL	ACGIH - TLV	Recommended PEL
Reactive dye	Undisclosed	70 - 80%	Not established	Not established	Lowest possible exposure or zero with best poe

Important Notice:

CONTACT with Section 2 ingredients may be hazardous based on OSHA 29 CFR 1910.1200 & related appendices. Unless otherwise noted for disclosure purposes, any components not listed are confidential, non-hazardous, or below reportable limits. Confidential information is available to medical or emergency personnel. Use ALL PROTECTIVE EQUIPMENT & CLOTHING (Section 8) TO MINIMIZE or ELIMINATE CONTACT. Effects from UNPROTECTED may be unpredictable, depending on individual reactions. End-users are responsible for hazard determination and communication.

SECTION 3: HAZARD IDENTIFICATION AND EMERGENCY OVERVIEW

Emergency Overview:

May cause eye, skin or respiratory irritation, allergic reactions, or sensitization in some individuals. For IMPORTANT WARNINGS SEE BELOW.

Eye Contact:

UNPROTECTED exposure to dusts, vapors, mists, splashes, droplets or aerosols of product may cause VARYING DEGREES OF IRRITATION, discomfort, redness, swelling, watering, itching, burning feeling, possible eye damage with heavy centact, other effects. May cause ALLERGIC REACTIONS in some workers. A DOCTOR SHOULD BE CALLED IF A WORKER EXPERIENCES PUFFINESS AROUND THE EYES, OR OTHER ALLERGIC SYMPTOMS. PERSONS ALLERGIC TO DYES OR SUSPECTED OF BEING ALLERGIC SHOULD COMPLETELY AVOID EXPOSURE TO THEM. See inhalation and skin contact sections for other possible effects. Take precautions.

Skin Contact:

Depending on degree of UNPROTECTED contact, vapors, mists, splashes, aerosols, or dusts of product may cause IRRITATION, ALLERGIC REACTIONS, redness, rash, itching, burning feeling, drying, cracking, pain, swelling, or other effects in some sensitive individuals. Prolonged or repeated contact may cause inflammation, or other effects in some persons.

Inhalation:

Persons allergic to dyes or other chemicals, or suspected of being allergic or sensitive should avoid contact. UNPROTECTED breathing of dust, vapors, mists, or aerosols of product may cause IRRITATION to nose, throat, lungs & mucous membranes, discomfort and other effects. THOUGH RARE, ALLERGIC REACTIONS, ASTHMATIC EFFECTS, OR SENSITIZATION is possible IN SOME INDIVIDUALS. *** CALL 911 or DOCTOR IMMEDIATELY IF WORKER EXPERIENCES: TIGHT CHEST, HARD BREATHING, COUGH, CHEST PAIN, WHEEZING, ITCHY-RUNNY, OR BLOCKED NOSE, DIZZINESS OR OTHER EFFECTS *** In RARE CASES effects can lead to shock, cardiovascular collapse, and may be LIFE-THREATENING. *** AS A PRECAUTION: CALL 911 or DOCTOR IMMEDIATELY IF WORKER EXPERIENCES ASTHMATIC ATTACK, LUNG SPASMS, FAINTING, OR OTHER ALLERGIC RESPIRATORY REACTIONS.

Ingestion:

NOT EXPECTED to be a hazard with proper handling and good chemical hygiene procedures being followed. Wear appropriate, chemically impervious gloves to avoid accidental transferring and swallowing of chemical residue. This chemical may be a greater health hazard if swallowed deliberately, or in a large amount. In such cases, some effects may parallel those of inhalation or skin absorption.

Medical Conditions Aggravated by Exposure:

IMPROPERLY PROTECTED exposure to vapors, mists, aerosols, liquids, splashes or dusts of product by inhalation, eye contact, or skin contact MAY AGGRAVATE pre-existing conditions or diseases of the respiratory system, skin, or eyes. Product containing solvents may aggravate Central Nervous System conditions or diseases. Individuals above-noted conditions or nown or suspected chemical sensitivities or allergies should avoid working with chemicals.

Skin Sensitization:

IMPROPER protection from contact with product may cause SKIN SENSITIZATION OR ALLERGIC REACTIONS in some individuals. Effects may include redness, swelling, itching, rash and hives. It may take repeated or prolonged exposure to cause health effects. SENSITIZATION or ALLERGIC REACTIONS ARE UNPREDICTABLE. If symptoms appear, IMMEDIATELY remove person from area of contact, follow Section 4 instructions, GET MEDICAL ATTENTION. Persons known to have or suspected of chemical sensitivity or allergy should not work with chemicals.

Respiratory Sensitization:

None for this material

None for this material

Unusual Health Hazards:

Avoid contact. Persons known to be or suspected of being chemically sensitive or allergic should not work with chemicals. Improper protection from inhalation of product dust, mist, vapor, etc. MAY CAUSE RESPIRATORY SENSITIZATION OR ALLERGIC REACTIONS in some individuals. Symptoms may include: Itching watery eyes, swelling of eyelids. sneezing, itchy, runny nose., cough, shortness of breath, asthma-like symptoms such as tight chest, difficult breathing. It may take repeated or prolonged exposure for symptoms to appear. ALLERGIC & SENSITIZATION REACTIONS CAN BE

UNPREDICTABLE and MAY BE LIFE-THREATENING FOR SOME INDIVIDUALS, possibly leading to shock and cardiovascular collapse. If symptoms appear, IMMEDIATELY remove person from contact area, GET MEDICAL HELP and follow Section 4 instructions. Special Warnings:

Supplemental Hazard Information: None at this time Notes to Physician: Treat Symptomatically, based on Section 3 Hazard Warnings unless otherwise indicated Cancer Information: *** Not known to contain carcinogens ***

SECTION 4: FIRST AID INSTRUCTIONS

Eye Contact:

Immediately rinse with flowing water for at least 15 minutes while holding eyelids open. Get immediate medical attention, as a precaution.

Skin Contact:

Immediately remove contaminated clothing. Wash affected area with soap and rinse with plenty of water. Get medical attention, as a precaution.

Inhalation:

Immediately move person to fresh air. If breathing is difficult give oxygen, call 911, calm the individual. If not breathing, call 911, give artificial respiration (CPR) until medical help arrives. Have this Material Safety Data Sheet available.

Ingestion:

Do not induce vomiting unless directed to do so by a doctor or by other emergency medical personnel. not induce vomiting unless directed to do so by doctor or other emergency personnel. Forced vomiting of certain chemicals may cause aspiration and lung damage. Have this Material Safety Data Sheet available.

SECTION 5: FIRE FIGHTING INSTRUCTIONS

Flash Point:

Not applicable

Unusual hazards:

None expected

Other Hazards:

None known

Types of Extinguishers:

CO2, dry chemical, foam, water fog or spray depending on type of fire

Fire Fighting Directions:

Wear self-contained breathing equipment and fire-proof clothing. Use water spray to cool fire exposed containers if they cannot be safely moved.

SECTION 6: ACCIDENTAL SPILL OR RELEASE INSTRUCTIONS

Special Precautions:

None known. Follow general precautions shown below.

Static Discharges:

Take precautionary measures against static discharges when cleaning up leaks or spills of powders, combustibles, or flammable liquids. Containers should be properly grounded with metal straps, cables or other appropriate means to relieve static electricity build-up or generation.

Environmental Protection:

Immediately dike liquid spills with inert absorbent material (sand, "Oil Dry" or other commercially available spill absorbent) to contain and soak up liquid. Prevent material from entering floor drains, sewers, or any bodies of water. For powder spills, use sweeping compound, sawdust, or other appropriate material to contain dust. If possible, recover any uncontaminated materials to re-use.

Protective equipment and clothing:

Wear all proper personal protective equipment and clothing to care for spill situation. See section 8 of this MSDS.

Clean up:

After containing liquid spill by diking and soaking up with inert absorbent material, place in labeled container to be sealed for proper and regulated disposal. Only the slightest residue should remain. Try to save uncontaminated material for reuse whenever possible. For powders, use sweeping compound to minimize dust and pick up as much product as possible. Do not allow liquids to seep into drains, sewers, lakes, rivers, etc. Check Sections 1 and 2 for dye description or type. Solvent dye residue may be cleaned by scrubbing with detergent, depending on type. Do not add water to water-soluble dyes. Dye is concentrated. This will increase amount of color to remove. All cleaning or scrubbing liquids used should be absorbed and placed in labeled containers for correct disposal. Absorbent material containing solvents may release combustible or flammable vapors and should be handled accordingly, properly labeled and disposed. Check Sections 2, 5, 13 & 15 for applicable instructions and regulations.

SECTION 7: HANDLING AND STORAGE

Warnings and Precautions:

No special precautions anticipated. Wear all PPE in section 8 as a precaution, and avoid physical contact with material.

Personal Protection:

Wear ALL proper personal protective equipment as outlined in section 8 of this MSDS.

Handling, Storage & Temperature Conditions:

Keep containers tightly sealed in cool & dry area, out of direct sunlight. FOR PRODUCTS LISTING FLAMMABLE/COMBUSTIBLE SOLVENTS or LOW FLASH POINTS: Store away from fire hazards and ignition sources, high heat, open flames, welding, hot plates, steam pipes, radiators, etc. Maintain good ventilation. Guard against static discharges. Ground all containers before mixing or filling. Use non-sparking tools to open, close or otherwise work with containers. Limit indoor storage to approved areas with automatic sprinklers. Vapors expected to be released when material is heated during process operations. At minimum, follow all Section 8 recommendations for Exposure Controls and Personal Protection. FOR WATER-BASED PRODUCTS: Do not freeze. Also ground containers when filling or mixing powders.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Note: Selecting protective equipment & clothing:

When choosing personal protective equipment and clothing, consider each worker environment, all chemicals being handled, temperature and all other conditions.

Eye protection:

Always wear indirectly vented, splash-proof chemical safety goggles under a clear face-shield. Face shield is not to be used without these goggles.

Skin Protection:

Always wear the most impervious, chemical-resistant synthetic or rubber gloves. Check with glove manufacturer to be sure you have the best glove for the chemicals being handled. Wear good quality long sleeved work work, proper coveralls, and a rubber or plastic apron. Wash hands after handling and before eating, drinking or using restroom. Shower after each shift. Clean contaminated protective equipment and clothing before reusing and wearing again.

Respiratory Protection:

Depending on materials handled, ALWAYS wear an appropriate NIOSH approved organic vapor/mist respirator, or dust respirator, with all proper filters as required whenever exposure to vapors or dusts is expected. After each shift or when equipment becomes contaminated, clean respirator in compliance with 29 CFR 1910.134.

Eye Washes and Other Protection:

Eye wash stations and drench showers should be located within 100 feet or 10-second walk of the work area per ANSI standard Z358.1-1990.

Ventilation:

Local exhaust should be used to maintain exposure limits below specified amounts recommended by OSHA, NIOSH, or ACGIH and to draw spray, aerosol, vapors, or dusts away from workers and prevent routine inhalation. At least 10 air changes per hour are recommended for good room ventilation.

Airborne Exposure Limits:

Not referenced in literature

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

pH:

Not established

% Total Solids / Non-Volatiles:

100

Color:

Yellowish powder. Not established

Form:

Powder

Odor:

None

Freezing/Melting Point: Specific Gravity (Liquid):

Bulk Density (Solid):

Not established Not established

Water Solubility:

Soluble (150 g/l @ 20 °C)

Solvent Solubility:

Test as applicable

Other Properties:

No further data

All Data shown above are typical values, not specifications.

Any quantity of VOC's reported here is calculated based on the U.S. EPA definition. State or local definitions may differ. To request additional Regulatory Compliance Data, call 312-666-2015.

SECTION 10: STABILITY AND REACTIVITY

Stability:

Product is expected to be stable under normal, ambient (controlled) conditions concerning heat, moisture, pressure, fire and ignition hazards, and ventilation. Contact with incompatible or reactive materials may cause hazardous reactions in some products if indicated. Check information below.

Hazardous Polymerization:

Product will not undergo polymerization.

Conditions to Avoid:

None known

Incompatible Materials:

None known

Hazardous Decomposition Products:

In fire: Possibly toxic or otherwise harmful fumes.

Possible Hazard Reactions:

None known

SECTION 11: TOXICOLOGICAL INFORMATION

Oral LD50 (Rat):

> 2000 mg/kg

Eye Effects (Rabbit):

Non-irritant

Skin Effects (Rabbit):

Non-irritant

Mutagenicity:

No data currently available No data currently available

Inhalation LC50 (Rat): Skin Sensitization (Guinea Pig):

No data currently available

Respiratory Sensitization:

No data currently available

Additional Toxicity Data:

No data currently available

SECTION 12: ECOLOGICAL DATA

BOD:

COD:

No data currently available

No data currently available

Aquatic Toxicity:

No data currently available

Biodegradability:

< 10%. Method: Batch method. Analytical method: Photometry.

Persistence: Ecotoxicity: No data currently available No data currently available

Sewage Treatment:

Undetermined

Other Data:

No additional data is available

SECTION 13: DISPOSAL AND ENVIRONMENTAL CONSIDERATION

Reuse of materials:

Reclaim all uncontaminated material to reuse, recycle or otherwise rework whenever possible.

Contain - Do not release:

Do not release into sewers, water systems, ground systems or ecosystems without proper authorization.

Disposal Methods:

Incinerate, treat, or bury (landfill), after sampling and testing, at facility approved by applicable federal, state, and local authorities.

Empty Containers:

Empty containers may contain residue and/or vapors and should not be reused unless professionally cleaned and reconditioned. Crush if not cleaned, to prevent reuse.

Applicable Regulations:

See Section 15 if regulated

Special Instructions:

See Section 15 if regulated

SECTION 14: SHIPPING AND TRANSPORTATION INFORMATION

DOT Regulations (Ground):

NOT REGULATED

IATA Regulations (Air):

NOT REGULATED

SECTION 15: REGULATORY INFORMATION

Regulatory List Reference:

NOTE: Regulations only apply when List Number(s) below are shown on line(s) above this note. Example A: 5, 8 (Indicates chemical is listed as an EPA HAP and a Marine Pollutant)

Example B: 10: D007, 11: 5000 (Indicates chemical is a hazardous waste (Chromium), and is an EHS

with RQ of 5000 lbs.) Number immediately after List Number is the RQ.

List Numbers

1-Accidental Release Substance

2-CERCLA 304 Hazardous Substance (RQ)

SARA 311/312 Hazard Categories:

Immediate / Acute Health Hazard: YES
Chronic / Delayed Hazard: YES
Fire Hazard: NO
Sudden Release of Pressure Hazard: NO
Reactivity Hazard: NO

NATIONAL CHEMICAL INVENTORIES:

AICS (Australia): Not yet determined ASIA-PAC (Asia-Pacific): Not yet determined DSL (Canada): Not yet determined ECL (Korea): Not yet determined Not yet determined **EINECS** (Europe): ENCS (Japan): Not yet determined Not yet determined IECSC (China): Not yet determined PICCS (Philippines): Components Listed TSCA (US):

Supplemental Regulatory Information:

For additional International, Federal or State regulatory compliance information not shown: Call 312-666-2015.

SECTION 16: OTHER INFORMATION

Reason for Revision: New format Reviewed: wln 112706

Disclaimer:

OTHER:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. This Material Safety Data Sheet was prepared to comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200, and supersedes any previous information. Previously dated sheets are invalid and inapplicable.

Turquoise MX-G

Page 1/5

Dharma Trading Co 654 Irwin Street

Colors:

654 Irwin Street 2, 3A, San Rafael CA 94901 28B 2

2, 3A, 5, 6, 6A, 7A, 11A, 14, 16, 21, 23, 23A, 25, 28A, 28B, 29, 30, 31A, 32, 36A, 37, 38A, 43, 47, 50, 51, 62,

66, 71, 80, 93, 97, 101, 105, 108, 114

24 Hour Emergancy Phones In U.S. Call CHEMTEL 1-800-255-3924 Outside U.S. call CHEMTEL Collect at: 1-813-248-0585

HMIS code: 2 - 1 - 0

Chemical family

phthalocyanine copper complex reactive dyestuff dust free preparation

2) Hazardous ingredients

Remarks

This product is not regulated under the OSHA hazard communication standard, 29CFR1910.1200. or SARA Title III Sect. 312

3) Hazards identification

Primary route of exposure

Inhalation: Yes

Skin Absorption: No

Ingestion: No

Skin Contact: Yes

Eye Contact: Ye

Carcinogen status

IARC: No

NTP: No

OSHA: No

ACGIH: No

Effects of overexposure

Found to be a non-irritant when tested on skin and eyes of rabbits. Prolonged direct contact with this product may cause eye and skin irritation. This product belongs to the class of reactive dyestuffs. Occasional cases of respiratory sensitization have been observed by inhalation of certain reactive dyestuffs. Sensitization by this product has not been observed. Nevertheless, avoid inhalation.

Signs and symptoms of overexposure

Skin sensitization may include one or more of the following: redness, swelling, itching, rash and hives., Respiratory sensitization can range from runny nose, cough and irritated eyes to asthmatic symptoms. These effects can lead to shock and cardiovascular collapse and are potentially lethal

Medical conditions aggravated

Persons with any pre-existing skin, eye or respiratory condition may be more susceptible to the effects of this product.

4) First aid measures

General information: Take off immediately all contaminated clothing.

Turquoise MX-G

Page 2/5

After contact with eyes: Contamination of the eyes must be treated by thorough irrigation with water, with the eyelids held open. A doctor (or eye specialist) should be consulted immediately.

After contact with skin: Remove all contaminated clothing immediately. Cleansing with plenty of water, soap or other non-irritating cleansing agents.

After ingestion: If the product is swallowed, the patient must at once drink water repeatedly, if possible with the addition of activated carbon. If the patient feels unwell, seek medical advice.

After inhalation: Upon inhalation of aerosol/vapour/dust: Take the patient into the fresh air; if there is difficulty in breathing, medical advice is required.

5) Fire-fighting measures

Suitable extinguishing media: water mist, foam, dry powder

Extinguishing media that must not be used for safety reasons: CO2

Special protective equipment for firefighting: Firemen have to wear self-contained breathing apparatus.

Further information: Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6) Accidental release measures

Personal precautions: Avoid formation and deposition of dust.

Environmental precautions: Do not empty into drains or waters.

Methods for cleaning up/taking up: Take up spilled product with dust-binding material or suitable vacuum cleaner. Fill into labelled, sealable containers.

Additional information: For further disposal measures see chapter 13.

7) Handling and storage

Advice on safe handling: Avoid formation and deposition of dust. Keep container tightly closed and dry.

Advice on protection against fire and explosion: Observe the usual precautionary measures required for chemicals with dust-explosive properties. Observe national regulations.

Storage stability Storage period: 60 Months

8) Exposure controls/personal protection

Turquoise MX-G

Page 3/5

General protective measures: Do not breathe dust. Avoid contact with eyes and skin. Take off immediately all contaminated clothing.

Inhalation of dust and aerosols must be absolutely prevented by either adequate ventilation or by a suitable mask. People with chronic respiratory problems should not work with reactive dyestuff powders. If symptoms such as tightness in the chest or asthma occur while handling reactive dyestuff powders, a physician should be consulted as soon as possible. If hypersensitivity is confirmed, all contact with reactive dyestuff powders must cease immediately.

Hygiene measures: Keep away from food and drink stuffs.

Do not eat, drink or smoke at work.

Wash hands before breaks and at end of work and use skin-protecting ointment.

If airborne concentrations pose a health hazard, become irritating, or Respiratory protection:

exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29

CFR 1910.134.

Wear suitable gloves e.g. of PVC or nitrile rubber. In the event of Hand protection:

contamination, change protective gloves immediately.

safety glasses with side protection shield Eye protection:

Wear protective clothing. Body protection:

Physical and chemical properties

Form: powder

dark-blue Colour:

odourless Odour:

> 300 ℃ Melting point :

approx. 120 g/l (20 °C) Solubility in water:

approx. 7.0 (20 °C, 10 g/l) pH value:

Unit: % Comment: as VOC's. % Volatile Value: 0

10) Stability and reactivity

No thermal decomposition when stored and handled correctly. Thermal decomposition

Hazardous reactions: In the case of dusty organic products the possibility of a dust explosion should always be considered.

11) Toxicological information

Acute oral toxicity: LD50 > 5,000 mg/kg (rat)

Irritant effect on skin: non-irritant (rabbit)

Turquoise MX-G

Page 4/5

Irritant effect on eyes:

non-irritant (rabbit eye)

Sensitization:

non-sensitizing

Method: Maximisation Test

Sensitization:

High dust concentration may result in irritation of the mucous membranes (eyes or respiratory tract). Repeated exposure to high dust concentration of some reactive dyestuffs may very occasionally cause respiratory hypersensitivity. A sensitisation

by this dyestuff has not yet been observed.

Remarks: Test results of a similarly composed product

12) Ecological Information

Biodegradability:

< 20 %

Method: Batch method

Analysis method:, Photometry

Biodegradability:

biological waste water treatment plants, no adverse effect on

If regulations are followed when introducing effluent into

the degradation activity of activated sludge is to be expected.

Fish toxicity:

> 100 mg/l (96 h, Oncorhynchus mykiss)

Bacteria toxicity:

IC50 > 10 mg/l (activated sludge)

Chemical oxygen demand (COD):

approx. 1,100 mg/g

Remarks: Test results of a similarly composed product

Contains organically bound halogen, but in hydrolysable form. This reactive dye can slighley increase the adsorbable organic halogen contentof the effluent.

This product contains approx. 2,6 % complex bonded copper.

The product does not release nitrogen which can contribute to eutrophication.

The product does not contain phosphates or organophosphorus compounds.

13) Disposal considerations

Product: If utilisation or recycling of the product is not possible, it should be disposed of according to the local regulations and laws, e.g. by incineration in a suitable plant.

Uncleaned packaging: Soiled, empty containers are to be treated in the same way as the contents.

14) Transport Information

D.O.T. Information

CFR IMDG Non-hazardous goods

IATA C

Non-hazardous goods Non-hazardous goods

IATA P

Non-hazardous goods

Turquoise MX-G

Page 5/5

Other information Keep separated from foodstuffs.

15) Regulatory information

US Regulations

TSCA

The components of this product are listed on the TSCA inventory.

Sara 313

This product contains the following component that is subject to the reporting requirements under 40 CFR 372.

contains:

Content: 60 - 65 % Copper compound

Sara 312

Immediate (acute) health hazard No Delayed (chronic) health hazard No Fire hazard No Sudden Reactivity

Other regulations
Labelling in accordance with the EEC directives:

Do not breathe dust. Sudden Release of Pressure No

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.