



**MATERIAL SAFETY DATA SHEET**  
**DualGlo Orange Effect Pigment JTE 5679**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product Name** DualGlo Orange Effect Pigment JTE 5679  
**Manufacturer/Supplier** DualGlo LTD  
**Address** Central Boulevard  
Blythe Valley Business Park  
Solihull, B90 8AG  
United Kingdom  
  
**Phone Number** +44(0) 1564 711 096  
**Revision Date:**  
**MSDS Date:** March 1, 2008  
*Material Safety Data Sheet according to OSHA's Hazcom Standard (29 CFR 1910.1200)*

**2. HAZARDS IDENTIFICATION**

**Routes of Entry**

- Eye contact - Skin contact - Inhalation

**Carcinogenic Status**

Not considered carcinogenic by NTP, IARC, and OSHA.

**Target Organs**

- Skin - Eye - Respiratory System

**Health Effects - Eyes**

Dust may cause irritation.

**Health Effects - Skin**

Contact may cause slight transient irritation.

**Health Effects - Ingestion**

Swallowing may have the following effects: - irritation of mouth, throat and digestive tract  
Ingestion of high doses may cause adverse effects to blood, liver and adrenals.

**Health Effects - Inhalation**

Material may cause irritation to the respiratory system.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Component Name</b>	<b>CAS#</b>	<b>Concentration</b>
Dye	Proprietary	<1%
Boron Oxide	1303-86-2	1 - 5%
Dialuminum Strontium tetraoxide	12004-37-4	85 - 90 %
Inorganic Compounds	N.A.	~10%

**4. FIRST AID MEASURES**

**Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin**

Wash skin thoroughly with soap and water. Obtain medical attention if redness or soreness persists.

**Ingestion**

Have victim drink 1-3 glasses of water to dilute stomach contents. Obtain medical attention immediately.



**MATERIAL SAFETY DATA SHEET**  
**DualGlo Orange Effect Pigment JTE 5679**

---

**4. FIRST AID MEASURES**

---

**Inhalation**

Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.

**Advice to Physicians**

Treat symptomatically.

---

**5. FIRE FIGHTING MEASURES**

---

**Extinguishing Media**

Use water spray, foam, dry chemical or carbon dioxide.

**Unusual Fire and Explosion Hazards**

Avoid the formation of dust clouds. This product may give rise to hazardous fumes in a fire.

**Protective Equipment for Fire-Fighting**

Wear full protective clothing and self-contained breathing apparatus.

---

**6. ACCIDENTAL RELEASE MEASURES**

---

Avoid accumulation of dust. Sweep up into suitable containers for recovery or disposal. Wear appropriate protective clothing. Wear respiratory protection. Prevent the material from entering drains or water courses. Notify authorities if spill has entered water course or sewer or has contaminated soil or vegetation.

---

**7. HANDLING AND STORAGE**

---

Use in well ventilated area. Use local exhaust ventilation if conditions are dusty. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use. It is recommended to store in original containers. Storage area should be: - cool - dry - well ventilated - away from incompatible materials (see section 10 for materials to avoid)

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**Occupational Exposure Standards**

**Boron Oxide:**

ACGIH TLV: 10 mg/m<sup>3</sup>

OSHA PEL: 15 mg/m<sup>3</sup>

**Particles Not Otherwise Specified:**

ACGIH TLV: 3 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (inhalable)

OSHA PEL: 5 mg/m<sup>3</sup> (respirable), 15 mg/m<sup>3</sup> (total)

**Engineering Control Measures**

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

**Respiratory Protection**

Dust mask if conditions are dusty. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

**Hand Protection**

Chemical resistant gloves



**MATERIAL SAFETY DATA SHEET**  
**DualGlo Orange Effect Pigment JTE 5679**

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**Eye Protection**

Chemical goggles or safety glasses with side shields

**Body Protection**

Normal work wear.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

---

<b>Physical State</b>	Powder
<b>Color</b>	Orange
<b>Odor</b>	Odorless
<b>pH</b>	Not applicable.
<b>Specific Gravity</b>	3.4
<b>Melting Point (°C/F)</b>	No data
<b>Boiling Range/Point (°C/F)</b>	No data.
<b>Flash Point (PMCC) (°C/F)</b>	Not applicable.
<b>Vapor Pressure</b>	Not applicable.
<b>Solubility in Water</b>	Decomposes in contact with water.
<b>Vapor Density (Air = 1)</b>	No data.

---

**10. STABILITY AND REACTIVITY**

---

**Stability**

Stable under normal conditions.

**Conditions to Avoid**

Extreme heat - Contact with Incompatible Materials

**Materials to Avoid**

Acids – Fluorides - Strong Oxidizers - Water - Moisture

**Hazardous Polymerization**

Will not occur.

**Hazardous Decomposition Products**

Oxides of Carbon

---

**11. TOXICOLOGICAL INFORMATION**

---

**Acute Toxicity**

No relevant studies identified. Low order of acute toxicity expected.

**Chronic Toxicity/Carcinogenicity**

This product is not expected to cause long term adverse health effects. High doses of Dialuminum Strontium tetraoxide have caused adverse effects to the liver, blood and adrenals.

**Genotoxicity**

No relevant studies identified. This product is not expected to cause any mutagenic effects.

**Reproductive/Developmental Toxicity**

No relevant studies identified. This product is not expected to cause reproductive or developmental health effects.



**MATERIAL SAFETY DATA SHEET**  
**DualGlo Orange Effect Pigment JTE 5679**

---

**12. ECOLOGICAL INFORMATION**

---

**Mobility**

No relevant studies identified.

**Persistence/Degradability**

No relevant studies identified.

**Bio-accumulation**

No relevant studies identified.

**Ecotoxicity**

No relevant studies identified.

---

**13. DISPOSAL CONSIDERATIONS**

---

Dispose of in accordance with all applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Empty containers may contain residues. Dispose of containers with care.

---

**14. TRANSPORT INFORMATION**

---

<b>DOT CFR 172.101 Data</b>	Not Regulated
<b>UN Proper Shipping Name</b>	Not Regulated
<b>UN Class</b>	None.
<b>UN Number</b>	None.
<b>UN Packaging Group</b>	None.
<b>Classification for AIR Transportation (IATA)</b>	Consult current IATA Regulations prior to shipping by air.

---

**15. REGULATORY INFORMATION**

---

**TSCA Listing**

All ingredients in this product are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance (TSCA) Inventory.

**DSL/NDSL (Canadian) Listing**

All ingredients in this product are listed on or exempt from listing on the Canadian Domestic Substance List (DSL).

**WHMIS Classification**

D.2.B.

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

**California Proposition 65**

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

**SARA Title III Sect. 311/312 Categorization**

Immediate (Acute) Health Hazard

**SARA Title III Sect. 313**

This product contains the following chemicals which is listed in Section 313 at or above de minimis concentrations: NONE



**MATERIAL SAFETY DATA SHEET**  
**DualGlo Orange Effect Pigment JTE 5679**

---

**16. OTHER INFORMATION**

---

**NFPA Ratings**

NFPA Code for Flammability - 0  
NFPA Code for Health - 1  
NFPA Code for Reactivity - 0  
NFPA Code for Special Hazards - None

**HMIS Ratings**

HMIS Code for Flammability - 0  
HMIS Code for Health - 1  
HMIS Code for Reactivity - 0  
HMIS Code for Personal Protection - See Section 8

**Abbreviations**

N/A: Denotes no applicable information found or available  
CAS#: Chemical Abstracts Service Number  
ACGIH: American Conference of Governmental Industrial Hygienists  
OSHA: Occupational Safety and Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
STEL: Short Term Exposure Limit  
NTP: National Toxicology Program  
IARC: International Agency for Research on Cancer  
LC50: Lethal Concentration 50%  
LD50: Lethal Dose 50%

**Prepared By:** EnviroNet LLC.

The information contained herein is based on data believed to be accurate. However, no representation, warranty, or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for its own particular use. DualGlo LTD assumes no responsibility for personal injury or property damage resulting from use, handling or from contact with this product.

---