

SAFETY DATA SHEET



Revision Date 23-May-2015
Version 2

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Brown Oxide Dispersion
Product code POP4528

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Coloring agent
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier DayGlo Color Corp.
4515 St. Clair Avenue
Cleveland, OH 44103
(216) 391-7070
+1 216-391-7070 (outside the US)

E-mail Address ehs@dayglo.com

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

| | |
|-----------------|-------------|
| Carcinogenicity | Category 1A |
|-----------------|-------------|

2.2 Label elements

Signal Word
Danger

Hazard Statements
May cause cancer



Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3 Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

3. Composition/Information on Ingredients

Substance

| Chemical Name | CAS-No | Weight % |
|--|------------|----------|
| IRON OXIDE | 1309-37-1 | 10 - 20 |
| ALKYLARYL SULPHONATE | 26264-05-1 | 1 - 5 |
| Manganese (III) Oxide Mn ₂ O ₃ | 1317-34-6 | < 1 |
| CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND | 14808-60-7 | < 1 |
| CARBON BLACK | 1333-86-4 | < 1 |

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

| | |
|-----------------------|---|
| General advice | No information available. |
| Eye contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. Consult a physician if necessary. |
| Inhalation | Move to fresh air. If symptoms persist, call a physician. |
| Ingestion | Do NOT induce vomiting. Drink plenty of water. Consult a physician. |

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Recommendations for immediate medical care and/or special treatment

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Specific hazards arising from the substance or mixture**Special Hazard**

None known based on information supplied

Hazardous Combustion Products Carbon oxides. Nitrogen oxides (NOx).

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment.

6.2 Environmental precautions

Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Dike to collect large liquid spills. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Soak up with inert absorbent material. Keep in suitable and closed containers for disposal.

7. Handling and storage**7.1 Precautions for safe handling**

Hygiene measures When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection**8.1 Occupational Exposure Limits (OEL)**

| Chemical Name | ACGIH TLV | OSHA PEL | British Columbia | Alberta | Quebec | Ontario TWAEV |
|-------------------------|---|--|---|--------------------------|---|--------------------------|
| IRON OXIDE 1309-37-1 | TWA: 5 mg/m ³ respirable fraction | TWA: 10 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ | TWA: 10 mg/m ³ TWA: 3 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³ | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ TWA: 10 mg/m ³ | TWA: 5 mg/m ³ |

| | | | | | | |
|--|--|---|--|------------------------------|----------------------------|-----------------------------|
| | | respirable fraction | | | | |
| Manganese (III) Oxide Mn ₂ O ₃ 1317-34-6 | TWA: 0.02 mg/m ³ Mn TWA: 0.1 mg/m ³ Mn | Ceiling: 5 mg/m ³ Mn | TWA: 0.2 mg/m ³ Adverse reproductive effect | TWA: 0.2 mg/m ³ | TWA: 0.2 mg/m ³ | TWA: 0.2 mg/m ³ |
| CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7 | TWA: 0.025 mg/m ³ respirable fraction | : (30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction | TWA: 0.025 mg/m ³ | TWA: 0.025 mg/m ³ | TWA: 0.1 mg/m ³ | TWA: 0.10 mg/m ³ |
| CARBON BLACK 1333-86-4 | TWA: 3 mg/m ³ inhalable fraction | TWA: 3.5 mg/m ³ | TWA: 3 mg/m ³ | TWA: 3.5 mg/m ³ | TWA: 3.5 mg/m ³ | TWA: 3 mg/m ³ |

8.2 Appropriate engineering controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Liquid |
| Appearance | Paste Liquid |
| Color | Brown |
| Odor | Mild |
| Odor Threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Methods</u> |
|-------------------------------------|---------------------|--------------------------|
| pH | 7.0 | |
| Melting/freezing point | | No information available |
| Boiling point/boiling range | > 94 °C / 201 °F | |
| Flash Point | > 149 °C / > 300 °F | |
| Evaporation rate | | No information available |
| Flammability (solid, gas) | | No information available |
| Flammability Limits in Air | | |
| upper flammability limit | | No information available |
| lower flammability limit | | No information available |
| Vapor pressure | | |
| Vapor density | | |
| Specific Gravity | 1.46 | |
| Water solubility | Negligible | |
| Solubility in other solvents | | No information available |
| Partition coefficient | | No information available |
| Autoignition temperature | | No information available |
| Decomposition temperature | | No information available |
| Viscosity, kinematic | | No information available |
| Viscosity, dynamic | | No information available |
| Explosive properties | | No information available |
| Oxidizing Properties | | No information available |

9.2 Other information

Volatile organic compounds (VOC) content None

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

Product Information

- No information available

Component Information

- No information available

STOT - single exposure

No information available

STOT - repeated exposure

• Signs and symptoms (CAS# 13463-67-7) of acute exposure to titanium dioxide may include physical irritation of skin and eyes, with redness and swelling; cough; and sneezing. Signs and symptoms of chronic exposure to titanium dioxide may include X-ray evidence of mild fibrosis; dyspnea; cough; and declines in pulmonary function. Titanium dioxide is not known to cause sensitization.

Other adverse effectsTarget Organs

- Eyes
- Lungs
- Respiratory system
- Skin

Product Information

- No information available

Component Information

- No information available

Aspiration hazardProduct Information

- No information available

Component Information

- No information available

12. Ecological information

12.1 Toxicity**Ecotoxicity**

No information available

72.91894 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects**12.2 Persistence and degradability**

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste Disposal Guidance

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

14. Transport Information

| | |
|--------------------|---------------|
| <u>DOT</u> | Not regulated |
| <u>MEX</u> | Not regulated |
| <u>IMDG</u> | Not regulated |
| <u>IATA</u> | Not regulated |

15. Regulatory information

15.1 International Inventories

| | |
|----------------------|----------|
| TSCA | Complies |
| DSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | - |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |
| NZIoC | - |

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | California Prop. 65 |
|---|---------------------|
| CARBON BLACK - 1333-86-4 | Carcinogen |
| CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7 | Carcinogen |

16. Other information

| | | | | |
|-------------|-------------------------|-----------------------|--------------------------|--|
| NFPA | Health Hazard - | Flammability - | Instability - | Physical and chemical hazards - |
| HMIS | Health Hazard 1* | Flammability 1 | Physical Hazard 0 | Personal protection X |

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Prepared By

DayGlo Color Corp.
Regulatory Affairs/Product Safety
23-May-2015

Revision Date**Revision Note**

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet