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

1.1 Product identifiers: BPI Molecular Catalytic Dyes; BPI Deep Red (Monochrome) 600 Dye; BPI UV-Blue Barrier 440; BPI Diamond Dye 460/510; BPI Diamond Dye 540; BPI Diamond Dye 500/550; BPI EVA Tints; BPI VDT Tints; BPI IR Dyes; BPI Red Out; BPI Sport Tints; BPI UV IR Solar Tints; BPI Filter Vision tints; BPI Total Day; BPI Total Night; BPI Deep Blue Zee; BPI FL-41; Polycarbonate Dye Part A; Acrylic Dye Part A; BPI Turbo Tints.

Product codes: ALL LIQUID DYES EXCEPT : 20100, 20800, 21600, 21800, 22100, 25100, 25800, 26600, 26800, 27100, 29204, 30600, 31500, 32500, 37623/37870, 44908, 45100, 45400, 45500, 45900, 46200, 47600, 47900, 48000, 48400, 48700. (The MSDS for these excepted product codes follows this SDS).

1.2 Relevant Identified Uses of the substance or mixture and uses advised against:

Use: Impart tint to plastic eyeglass lenses.

Uses advised against: No data

1.3 Details of the supplier of the safety data sheet:

Brain Power Inc.; 4470 S.W. 74th Ave.; Miami, Florida ; USA 33155.

1.4 Emergency Telephone Number:

Telephone: 0013052644465 Fax: 0013052641467

Information department: 001 305 264 4465

Emergency contact: 001 305 264 4465 (x364)

2. Hazards identification

2.1 Classification of the substance or mixture according to Regulation EC 1272/2008 (CLP):

May cause an allergic skin reaction (H317).

2.2 GHS Label elements (EC) 1272/2008:

Pictogram(s): “Exclamation Point” (GHS07)

Signal Word: Warning!

Contains: N-[4-[(2-hydroxy-5-methylphenyl)azo]phenyl]acetamide; 9,10-anthracenedione, 1,4-diamino-, N,N'-mixed; 4-[(4-nitrophenyl)azo]aniline; 4-(phenylazo) benzene-1,3-diamine.

Hazard Statement(s): May cause an allergic skin reaction (H317).

Precautionary Statement(s): Avoid breathing spray (P261). Specific treatment: wash well with soap and water (P321). Wear protective gloves and eye protection (P280). If on skin: wash with plenty of soap and water (P302+P352). If skin irritation or rash occurs: get medical advice (P333+P313). Dispose of contents/container in accordance with local / national / international regulations (P501).

2.3 Other hazards: C. I. Disperse Yellow 3 has been found to produce tumors in feeding studies with laboratory animals. C.I. Solvent Orange 3 is a germ cell mutagen. Dyes may cause sensitization by skin contact; may cause
slight irritation by inhalation; may cause eye and skin irritation. Oral LD50 ~ 2g/kg (rat) is typical for disperse dye components.

3. Composition / information on ingredients

3.1 Substance:
   Chemical name:
   CAS-Reg.No:
   EC-No:
   EINECS-No:
   Further information:

3.2 Mixture:
   Description: Mix of AZO and ANTHRAQUINONE disperse dyes with surfactants in water.
   Chemical name: N-[4-[(2-hydroxy-5-methylphenyl)azo]phenyl]acetamide
   Synonym: C.I. Disperse Yellow 3 dye
   CAS-Reg.No: 2832-40-8
   EC-No: 220-600-8
   EINECS-No: 611-055-00-0
   Hazards: Skin sensitizer 1 (H317); Carcinogen 2 (H351).
   Concentration: 0% -0.99%

   Chemical name: 9,10-anthracenedione, 1,4-diamino-, N,N'-mixed
   Synonym: C.I. Disperse Blue 3 dye
   CAS-Reg.No: 2475-46-9
   EC-No: 219-604-2
   EINECS-No:
   Hazards: Acute Tox 4 (H302); Skin sensitizer 1 (H317); Eye irritant 2 (H319).
   Concentration: 0% -3%

   Chemical name: 4-[(4-nitrophenyl)azo]analine
   Synonym: C.I. Disperse Orange 3 dye
   CAS-Reg.No: 730-40-5
   EC-No: 211-984-8
   EINECS-No:
   Hazards: Skin sensitizer 1 (H317); Eye irritant 2 (H319).
   Concentration: 0% -3%

   Chemical name: 4-[(phenylazo) benzene-1,3-diamine
   Synonym: C.I. Solvent Orange 3 dye
   CAS-Reg.No: 495-54-5
   EC-No: 207-803-7
   EINECS-No: 611-151-00-2
   Hazards: AcuteTox 4 (H302); Skin irritant 2 (H315); Mutagen 2 (H341); Aquatic Acute 1(H400); Aquatic Chronic 1 (H410).
   Concentration: 0%-0.24%

Maximum Total Disperse Dye concentration:
Content: 3%

Ingredients at concentrations not known to be hazardous:
Content: 97% - 100%

Further information: Other ingredients not at concentrations known to be hazardous. Not all components are in all dyes.
4. First-aid measures

4.1 Description of first aid measures

General Advice: Consult a physician. Show this safety data sheet to the doctor. If exposed or concerned, get medical advice/attention (P308+313).

Inhalation: Avoid breathing spray (P261). Move to fresh air.

Skin contact: If on skin: wash with plenty of soap and water (P302+P352). Flush exposed area well with water for at least 15 minutes. If skin irritation or rash occurs: get medical advice (P333+P313).

Eye contact: If in eyes, rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing (P305+P351+P338).

Ingestion: If swallowed, call a poison center or physician if you feel unwell (P301+P312). Rinse mouth with water (P330). Show the container, safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2 and/or section 11).

4.3 Indications of any immediate medical attention and special treatment needed

See section 2.2.

5. Fire-fighting measures

5.1 Extinguishing media: Water fog, dry chemical, carbon dioxide, foam.

Unsuitable extinguishing media: No data

5.2 Special hazards arising from the substance or mixture:

May cause allergic skin reaction (H317). Decomposes to oxides of carbon, nitrogen and/or sulphur.

5.3 Advice for fire-fighters:

Wear self-contained breathing apparatus with protective clothing to avoid personal contact.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid skin contact. Do not swallow. Wear impervious gloves (such as disposable latex) and splash proof chemical goggles. For major spills wear a NIOSH or CEN approved respirator. If on skin: wash with plenty of soap and water (P302+P352).

6.2 Environmental precautions:

Soak up all spills with inert absorbent material. Place in closed container for proper waste disposal.

6.3 Methods and materials for containment and cleaning up:

Soak up all spills with inert absorbent material. Place in closed container for proper waste disposal.

6.4 Reference to other sections:

See Section 4 and 5.2

7. Handling and storage

7.1 Precautions for Safe Handling:

Wear protective gloves (P 280). Use personal protective equipment as required (P281). Avoid breathing dust or spray (P261). If on skin: wash with plenty of soap and water (P302+P352). Keep out of reach of children. Use only with appropriate equipment. Do not use a hot plate or open flame. Avoid eye and skin contact.

7.2 Conditions for Safe Storage, including any incompatibilities:

Stable on storage under normal conditions. Avoid oxidizing and reducing agents, strong acids and bases.
7.3 Specific End Use: Impart Tint to Plastic Eyeglass Lenses.

8. Exposure controls and personal protection
8.1 Control parameters: Contains no substances at concentrations with exposure limit values.
8.2 Exposure control: Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of workday.

Personal protective equipment:
Respiratory protection: Where risk assessment shows air purifying respirators are appropriate, use a NIOSH or CEN approved respirator for organic chemicals. Ventilation: Local mechanical exhaust is recommended.
Hand protection: Wear protective gloves (P280). Wear suitable impervious gloves (such as disposable latex).
Eye / face protection: Wear eye protection (P280). Chemical resistant safety goggles are strongly recommended.
Skin protection: Protective lab coat recommended. Wear suitable protective clothing and gloves.

9. Physical and chemical properties
9.1 Information on basic physical and chemical properties
Appearance: Colored liquid
Odour: Slight odor
Changes in physical state:
- Boiling point/Boiling range (°C): > 100°C (212F)
- Melting point/Freezing temperature (°C): < 0°C (32F)
Flash point (°C): > 100°C (212F)
Ignition temperature (°C): no data available
Autoignition: no data available
Explosion hazard: no data available
Explosion limits (Vol.-%): lower: N/D upper: N/D
Vapour pressure (mbar): Due to water.
Vapor density (g/cm3): Due to water
Bulk density (kg/m3): ~1000 kg/m3
Solubility in water: Miscible
Solubility in other solvents: no data available
pH-value: 7-8
Viscosity: no data available
9.2 Other safety information: no data available

10. Stability and reactivity
10.1 Reactivity: Hazardous polymerization will not occur.
10.2 Chemical Stability: Stable on storage under normal conditions.
10.3 Possibility of Hazardous Reactions: None Known
10.4 Conditions to avoid: None Known
10.5 Incompatible materials: Avoid oxidizing and reducing agents, strong acids and strong bases.
10.6 Hazardous decomposition products: Decomposes to oxides of carbon, nitrogen and/or sulphur.

11. Toxicological information
11.1 Information on toxicological effects:

Acute toxicity: Oral LD50~2g/kg (rat) is typical for disperse dye component.

Specific symptoms in animal experiments: Oral LD50~2g/kg (rat) is typical for disperse dye component. Disperse Yellow 3 has been found to produce tumors in feeding studies with laboratory animals.

Irritation effects: May cause slight irritation by inhalation. May cause serious eye irritation. If eye irritation persists, get medical advice. If skin irritation or rash occurs: get medical advice (P333+P313).

Sensitization: May cause an allergic skin reaction (H317). If skin irritation or rash occurs: get medical advice (P333+P313). Overexposure may cause redness and irritation.

Subacute to chronic toxicity: May aggravate existing skin condition.

Carcinogenicity, mutagenicity, teratogenicity:

NTP? No  
IARC Monographs? Not classifiable as to carcinogenicity to humans.  
OSHA Regulated? No

11.2 Other information: Overexposure may cause redness and irritation. Sensitization may occur with possible allergic reaction.

12. Ecological Information

12.1 Toxicity: Disperse Yellow 3 LC50 Pimephales promelas (fathead minnow) >180 mg/l – 96 hr; Solvent Orange 3 LC50 Oryzias Latipes: 0.3 mg/l - 48 hr.

12.2 Persistence and Degradability: Degrades under anaerobic conditions followed by aerobic conditions.

12.3 Bioaccumulative Potential: no data available

12.4 Mobility in Soil: no data available

12.5 Results of PBT and vPvP Assessment: no data available

12.6 Other Adverse Effects: no data available

13. Disposal considerations

13.1 Waste Treatment Methods: Dispose of contents/container in accordance with Local / national / international regulations (P501).

14. Transport Information

14.1 UN Number: None.

14.2 UN Proper Shipping Name: None.

14.3 Transport Hazard Class(es): None.

14.4 Packing Group: None.

14.5 Environmental Hazards: None.

14.6 Special precautions for user: None other than listed in sections 7 and 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not regulated goods.

14.8 Information for each of the UN Model Regulations: None.

IMDG/IMO: Not regulated goods  
ADR: Not regulated goods
Air transport

ICAO/IATA-DGR: Class: UN/ID-No.: none PG:
Technical name of material: Remarks: Not regulated for transport by air.

Additional information: (US) DOT: Not dangerous goods

15. Regulatory Information


15.2 Chemical Safety Assessment

Contains:

Warning! "Exclamation Point" (GHS07).
C.I. Disperse Yellow 3 dye;
C.I. Disperse Blue 3 dye; 9,10-anthracenedione, 1,4-
diamino-, N,N'-mixed;
C.I. Disperse Orange 3 dye; 4-[(4-nitropheno)azo]analine
C.I. Solvent Orange 3 dye; 4-(phenylazo) benzene-1,3-
diamine

Hazard statement: Precautions: See section 2 See section 2

15.3 Additional information:

TSCA listed ingredients. EC listed ingredients.

The following components are subject to reporting levels established by SARA Title III section 313:
C.I. Disperse Yellow 3.

Warning: These products contain a chemical (C.I. Disperse Yellow 3) known to the State of California to cause cancer.

German Water Hazard Class WGK 1.

16. Other Information

NFPA Codes: H: 1; F: 0; R: 0.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. The safety data sheet only describes the products in aspect to their safety requirements. Recipients of our product must take responsibility for observing existing laws and regulations.

6
1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier: **BPI Molecular Catalytic Dyes**

Product codes: 20100, 20800, 21600, 21800, 22100, 25100, 25800, 26600, 26800, 27100, 29204, 30600, 31500, 32500, 37623/37870, 44908, 45100, 45400, 45500, 45900, 46200, 47600, 47900, 48000, 48400, 48700.

1.2 Relevant Identified Uses of the substance or mixture and uses advised against:

Use: Impart tint to plastic eyeglass lenses.
Uses advised against: No data

1.3 Details of the supplier of the safety data sheet:

Brain Power Inc.; 4470 S.W. 74th Ave.; Miami, Florida ; USA 33155.

1.4 Emergency Telephone Number:

Telephone: 001 305 264 4465
Fax: 001 305 264 1467
Information department: 001 305 264 4465
Emergency contact: 001 305 264 4465 (x364)

2. Hazards identification

2.1 Classification of the substance or mixture according to Regulation EC 1272/2008 (CLP):

May cause an allergic skin reaction (H317)
Suspected of causing cancer (H351).

2.2 GHS Label elements (EC) 1272/2008:

Pictogram(s): “Health Hazard” (GHS08)  “Exclamation Point” (GHS07)

Signal Word: Warning

Contains: N-[4-((2-hydroxy-5-methylphenyl)azo)phenyl]acetamide;
9,10-anthracenedione, 1,4-diamino-, N,N'-mixed.
Hazard Statement(s): Suspected of causing cancer (H351)
May cause an allergic skin reaction (H317).

Precautionary Statement(s): Obtain special instructions before use (P201). Do not handle until precautions have been read and understood (P202). Read SDS. Avoid breathing spray (P261). Wear protective gloves and eye protection (P 280). If on skin: wash with plenty of soap and water (P302+P352). If skin irritation or rash occurs: get medical advice (P333+P313). Store locked up (P405). If exposed or concerned: get medical advice (P308+P313). Dispose of contents/container in accordance with local / national / international regulations (P501).

2.3 C. I. Disperse Yellow 3 has been found to produce tumors in feeding studies with laboratory animals. Dyes may cause sensitization by skin contact; may cause slight irritation by inhalation; may cause eye and skin irritation. Oral LD50 ~ 2g/kg (rat) is typical for disperse dye components.

3. Composition / information on ingredients
3.1 Substance:
Chemical name:
CAS-Reg.No: 2832-40-8
EC-No: 220-600-8
EINECS-No: 611-055-00-0
Hazards: Skin sensitizer 1 (H317); Carcinogen 2 (H351).
Concentration: 1% - 2%

Chemical name: 9,10-anthracenedione, 1,4-diamino-, N,N'-mixed
Synonym: C.I. Disperse Blue 3 dye
CAS-Reg.No: 2475-46-9
EC-No: 219-604-2
EINECS-No:
Hazards: Acute Tox 4 (H302); Skin sensitizer 1 (H317); Eye irritant 2 (H319).
Concentration: 0% - 3%

Maximum Total Disperse Dye concentration:
Content: 3%

Ingredients at concentrations not known to be hazardous:
Content: 97% - 100%
Further information: Other ingredients not at concentrations known to be hazardous. Not all components are in all dyes.

4. First-aid measures
4.1 Description of first aid measures
General Advice: Consult a physician. Show this safety data sheet to the doctor. If exposed or concerned, get medical advice/attention (P308+313).

Inhalation: Avoid breathing spray (P261). Move to fresh air.

Skin contact: If on skin: wash with plenty of soap and water (P302+P352). Flush exposed area well with water for at least 15 minutes. If skin irritation or rash occurs: get medical advice (P333+P313).

Eye contact: If in eyes, rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing (P305+P351+P338). If eye irritation persists, get medical advice. (P337+P313).

Ingestion: If exposed or concerned: get medical advice (P308+P313). Rinse mouth with water. Show the container, safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2 and/or section 11).

4.3 Indications of any immediate medical attention and special treatment needed
See section 2.2.

5. Fire-fighting measures
5.1 Extinguishing media: Water fog, dry chemical, carbon dioxide, foam.
Unsuitable extinguishing media: No data

5.2 Special hazards arising from the substance or mixture:
May cause allergic skin reaction (H317). Decomposes to oxides of carbon, nitrogen and/or sulphur.

5.3 Advice for fire-fighters: Wear self-contained breathing apparatus with protective clothing to avoid personal contact.

6. Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures: Avoid skin contact. Do not swallow. Wear impervious gloves (such as disposable latex) and splash proof chemical goggles. For major spills wear a NIOSH or CEN approved respirator. If on skin: wash with plenty of soap and water (P302+P352).

6.2 Environmental precautions: Soak up all spills with inert absorbent material. Place in closed container for proper waste disposal.

6.3 Methods and materials for containment and cleaning up: Soak up all spills with inert absorbent material. Place in closed container for proper waste disposal.

6.4 Reference to other sections: See Section 4 and 5.2

7. Handling and storage
7.1 Precautions for Safe Handling: Obtain special instructions before use (P 201). Do not handle until safety precautions have been read and understood (P 202). Wear protective gloves (P 280). Use personal protective equipment as required (P281). Avoid breathing spray (P261). If on skin: wash with plenty of soap and water (P302+P352). Keep out of reach of children. Use only with appropriate equipment. Do not use a hot plate or open flame. Avoid eye and skin contact.

7.2 Conditions for Safe Storage, including any incompatibilities:
Stable on storage under normal conditions. Avoid oxidizing and reducing agents, strong acids and bases. Store locked up (P405).
7.3 Specific End Use: Impart Tint to Plastic Eyeglass Lenses.

8. Exposure controls and personal protection

8.1 Control parameters: Contains no substances at concentrations with exposure limit values.

8.2 Exposure control: Handle in accordance with good industrial hygiene and safety practices. Avoid all personal contact. Wear appropriate safety equipment. Wash hands before breaks and at the end of workday.

Personal protective equipment:

- Respiratory protection: Where risk assessment shows air purifying respirators are appropriate, use a NIOSH or CEN approved respirator for organic chemicals. Ventilation: Local mechanical exhaust is recommended.
- Hand protection: Wear protective gloves (P280). Wear suitable impervious gloves (such as disposable latex).
- Eye / face protection: Wear eye protection (P280). Chemical resistant safety goggles are strongly recommended.
- Skin protection: Protective lab coat recommended. Wear suitable protective clothing and gloves.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Colored liquid
- Odour: Slight odor
- Boiling point/Boiling range (°C): > 100°C (212F)
- Melting point/Freezing temperature (°C): < 0°C (32F)
- Flash point (°C): > 100°C (212F)
- Ignition temperature (°C): no data available
- Autoignition: no data available
- Explosion hazard: no data available
- Explosion limits (Vol.-%): lower: N/D upper: N/D
- Vapour pressure (mbar): Due to water.
- Vapor density (g/cm3): Due to water
- Bulk density (kg/m3): ~1000 kg/m3
- Solubility in water: Miscible
- Solubility in other solvents: no data available
- pH-value: 7-8
- Viscosity: no data available

9.2 Other safety information: no data available

10. Stability and reactivity

10.1 Reactivity: Hazardous polymerization will not occur.
10.2 Chemical Stability: Stable on storage under normal conditions.
10.3 Possibility of Hazardous Reactions: None Known
10.4 Conditions to avoid: None Known
10.5 Incompatible materials: Avoid oxidizing and reducing agents, strong acids and strong bases.
10.6 Hazardous decomposition products: Decomposes to oxides of carbon, nitrogen and/or sulphur.

11. Toxicological information

11.1 Information on toxicological effects:
Brain Power Inc.
Safety Data Sheet according to EC 1907/2006, 1272/2008, 830/2015
Date of Issue: 4 January, 2019

Acute toxicity:
Oral LD50~2g/kg (rat) is typical for disperse dye component.

Specific symptoms in animal experiments:
Oral LD50~2g/kg (rat) is typical for disperse dye component. Disperse Yellow 3 has been found to produce tumors in feeding studies with laboratory animals.

Irritation effects:
May cause slight irritation by inhalation. May cause serious eye irritation. If eye irritation persists, get medical advice. If skin irritation or rash occurs: get medical advice (P333+P313).

Sensitization:
May cause an allergic skin reaction (H317). If skin irritation or rash occurs: get medical advice (P333+P313). Overexposure may cause redness and irritation.

Subacute to chronic toxicity:
May aggravate existing skin condition.

Carcinogenicity, mutagenicity, teratogenicity:
NTP? No
IARC Monographs? Not classifiable as to carcinogenicity to humans.
OSHA Regulated? No

11.2 Other information:
Overexposure may cause redness and irritation. Sensitization may occur with possible allergic reaction.

12. Ecological Information
12.1 Toxicity:
Disperse Yellow 3 LC50 Pimephales promelas (fathead minnow) >180 mg/l – 96 hr

12.2 Persistence and Degradability:
Degrades under anaerobic conditions followed by aerobic conditions.

12.3 Bioaccumulative Potential:
no data available

12.4 Mobility in Soil:
no data available

12.5 Results of PBT and vPvP Assessment:
no data available

12.6 Other Adverse Effects:
no data available

13. Disposal considerations
13.1 Waste Treatment Methods:
Dispose of contents/container in accordance with Local / national / international regulations (P501).

14. Transport Information
14.1 UN Number:
None.

14.2 UN Proper Shipping Name:
None.

14.3 Transport Hazard Class(es):
None.

14.4 Packing Group:
None.

14.5 Environmental Hazards:
None.

14.6 Special precautions for user:
None other than listed in sections 7 and 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:
Not regulated goods.

14.8 Information for each of the UN Model Regulations:
None.

IMDG/IMO:
Not regulated goods

ADR:
Not regulated goods

Air transport
ICAO/IATA-DGR
Class: UN/ID-No.: none PG:
Technical name of material: 
Remarks: Not regulated for transport by air.

Additional information: (US) DOT: Not dangerous goods

15. Regulatory Information


C.I. Disperse Blue 3 dye: 9,10-anthracenedione, 1,4-diamino-, N,N'-mixed;

Hazard statement: See section 2
Precautions: See section 2

15.3 Additional information:

TSCA listed ingredients. EC listed ingredients.

The following components are subject to reporting levels established by SARA Title III section 313:
C.I. Disperse Yellow 3.

Warning: These products contain a chemical (C.I. Disperse Yellow 3) known to the State of California to cause cancer.

German Water Hazard Class WGK 1.

16. Other Information

16.1 NFPA Codes: H: 2; F: 0; R: 0.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. The safety data sheet only describes the products in aspect to their safety requirements. Recipients of our product must take responsibility for observing existing laws and regulations.