SAFETY DATA SHEET

Revision Date 15-Jan-2021
Version 4.02

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

1.1 Product identifier

Product name Jazz Colors® Fire Orange™ Base
Product code JZB14

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

Recommended Use Ink Base
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) This telephone number is available during office hours only.

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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3 - (H335)

2.2 Label elements

Signal Word
Danger

Hazard Statements
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation

May cause an allergic skin reaction
May cause cancer
May cause respiratory irritation

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention Specific treatment (see .? on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water and soap
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

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

Unknown Acute Toxicity 1.79% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance
Mixture

Chemical Name	CAS No.	Weight-%
Tripropylene glycol diacrylate	42978-66-5	20 - 30
Ethoxylated trimethylolpropane triacrylate	28961-43-5	20 - 30
C.I. Basic Red 1:1	3068-39-1	1 - 5
Formaldehyde	50-00-0	< 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. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Call a physician immediately.

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 Indication of any immediate medical attention and special treatment needed

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 Special 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

Advice on safe handling Prevent contact with skin, eyes and clothing. Wash thoroughly after 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 at temperatures below 37°C. Protect from light.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Formaldehyde 50-00-0	Ceiling: 0.3 ppm	TWA: 0.75 ppm STEL: 2 ppm see 29 CFR 1910.1048	TWA: 0.3 ppm Ceiling: 1 ppm Sensitizer	Ceiling: 1 ppm Ceiling: 1.3 mg/m^3 TWA: 0.75 ppm TWA: 0.9 mg/m^3	Ceiling: 2 ppm Ceiling: 3 mg/m^3	STEL: 1.0 ppm CEV: 1.5 ppm

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 Wear chemical-resistant glasses and/or goggles and a face shield when eye and face contact is possible due to handling and processing of material.

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

Respiratory protection . 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	Liquid	**Color**	Orange
Odor	Pungent	**Odor Threshold**	No information available

Property	Values	Remarks • Methods
pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range	109 °C / 228 °F	
Flash Point	110 °C / 230 °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		No information available
Vapor density		No information available
Specific Gravity	1.22	
Water solubility	Insoluble in water	
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 data available

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

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

Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity 1.79% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50 24,150.00 mg/kg
LC50 (Dust/Mist) 2.67 mg/l
LC50 (Vapor) 333.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tripropylene glycol diacrylate 42978-66-5	3000 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
C.I. Basic Red 1:1 3068-39-1	449 mg/kg (Rat)	2,500 mg/kg (Rat)	0.05 mg/l (4 hours)
Formaldehyde 50-00-0	600 mg/kg (Rat)	= 270 mg/kg (Rabbit)	= 0.578 mg/L (Rat) 4 h

11.2 Information on toxicological effects

Skin corrosion/irritation
Product Information
• Irritating to skin
Component Information
• No information available

Serious eye damage/eye irritation
Product Information
• Causes serious eye damage
Component Information
• No information available

Respiratory or skin sensitization
Product Information
• May cause allergic skin reaction
• May be harmful if inhaled
Component Information
• No information available

Germ cell mutagenicity
Product Information
• No information available
Component Information
• No information available

Carcinogenicity
Product Information
• The table below indicates whether each agency has listed any ingredient as a carcinogen
Component Information
• Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Formaldehyde 50-00-0	A2	Group 1	Known	Group 1

Reproductive toxicity
Product Information
• No information available
Component Information
• No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Other adverse effects
Product Information
• No information available
Component Information
• No information available

Aspiration hazard
Product Information
• No information available
Component Information
• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity No information available

< 1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Tripropylene glycol diacrylate 42978-66-5	EC50: 72 h Desmodesmus subspicatus 28 mg/L	-	EC50: 48 h Daphnia magna 88.7 mg/L
Formaldehyde 50-00-0	-	LC50: 96 h Pimephales promelas 22.6 - 25.7 mg/L flow-through LC50: 96 h Lepomis macrochirus 1510 µg/L static LC50: 96 h Brachydanio rerio 41 mg/L static LC50: 96 h Oncorhynchus mykiss 0.032 - 0.226 mL/L flow-through LC50: 96 h Oncorhynchus mykiss 100 - 136 mg/L static LC50: 96 h Pimephales promelas 23.2 - 29.7 mg/L static	LC50: 48 h Daphnia magna 2 mg/L EC50: 48 h Daphnia magna 11.3 - 18 mg/L Static

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Tripropylene glycol diacrylate 42978-66-5	2.77
Formaldehyde 50-00-0	0.35

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

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

14. Transport Information

DOT	Not regulated
MEX	Not known

IMDG

Proper shipping name	UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Tripropylene glycol diacrylate), 9, PGIII
Hazard class	9
UN	UN3082
Packing Group	PGIII

IATA

UN	UN3082
Proper shipping name	UN3082, Environmentally hazardous substance, liquid, n.o.s., (Tripropylene glycol diacrylate), 9, PGIII
Hazard class	9
Packing Group	PGIII

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	Complies
KECL	-
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 Chemical Substances/European 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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %	Weight-%
Formaldehyde 50-00-0	0.1	< 1

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
Formaldehyde - 50-00-0	Carcinogen
C.I. Basic Violet 10 - 81-88-9	Carcinogen

16. Other information

NFPA	**Health Hazard** -	**Flammability** -	**Instability** -	**Physical and chemical hazards** -
HMIS	**Health Hazard** 2*	**Flammability** 1	**Physical Hazard** 2	**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
Revision Date 15-Jan-2021
Revision Note
No information available

Disclaimer

The information provided in this 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