

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Description FC-7900-WH White

Other means of identification

Part Number FC-7900-WH

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use ink.

Uses advised against No information available

Details of the supplier of the safety data sheet

Company Name

Direct Color Systems
99 Hammer Mill Rd.
Rocky Hill, CT 06067-
USA

Emergency telephone number Chemtrec 1-800-424-9300

Emergency Telephone International Chemtrec: +1 703-527-3887

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

Label Elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure

**Appearance** white**Physical state** liquid**Odor** Acrylic**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
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Contaminated work clothing should not be allowed out of the workplace
 Do not breathe dustume/gas/misUvapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 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 soap and water
 Take off contaminated clothing and wash before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) –**Other Information**

- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

Unknown acute toxicity

98.76 % of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%	Trade secret
2-Propenoic acid, 2-phenoxyethyl ester	48145-04-6	10 - 35	*
Monofunctional Acrylate	86273-46-3	1 - 25	*
Titanium dioxide	13463-67-7	1 - 20	*
2-Propenoic acid, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-Lactam	5888-33-5	1 - 20	*
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	Proprietary	1 - 15	*
Oliamer#2	75980-60-8	1 - 10	*
Acrylated Resin / Oligomer	PROPRIETARY	1 - 5	*
2-Propenoic acid, 2-[[[butylamino)carbonyl]oxy]ethyl ester	Proprietary	1 - 5	*
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	63225-53-6	1 - 5	*
	162881-26-7	1 - 5	*

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.',.alpha."_1,2,3-propanetriyltris[.ome ga.-[(1-oxo-2-propenyl)oxy]-	52408-84-1	0.1 - <1	*
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*The exact percentage (concentration) of composition has been withheld as a trade secret.

NOTE

Remaining components are either not hazardous or below threshold limits. This product contains substance(s) found on SNUR.

4. First aid measures

Description of first aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Immediate medical attention is required. If symptoms persist, call a physician.
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. Call a physician immediately. If symptoms persist, call a physician.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required.
Inhalation	Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required. If not breathing, give artificial respiration. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Symptoms	Hives.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Eye Contact - Emergency Medical Treatment Procedures: Some photoinitiators cure in the near UV and visible light range. Keep overhead lighting OFF as a precaution. Flush eyes for an additional 15-30 minutes prior to examination under light. DO NOT use UV light with fluorescent stain to examine injured eye without copious irrigation of the eye. May cause sensitization of susceptible persons. Use of epinephrine may be indicated. Treat symptomatically.
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5. Fire-fighting measures

Suitable extinguishing media

Water spray Carbon dioxide (CO₂) Dry chemical Cool containers with flooding quantities of water until well after fire is out Use

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not

breathe fumes. May cause sensitization in susceptible persons.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions 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

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers.

7. Handling and Storage

Precautions for safe handling

Handling Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Incompatible materials None known based on information supplied.

8. Exposure Controls/Personal Protection

Control parameters

Exposure assessment

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ TWA: 0.3 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tight sealing safety goggles. Face protection shield.
Skin and body protection	Special gloves must be worn when handling this material: Chemical resistant gloves. Butyl rubber (ex. North Butyl Black rubber gloves), or Ethylene-vinyl alcohol copolymer laminated rubber (ex. Dailove T-1) is applicable.
Respiratory protection	If exposure limits are exceeded or 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.

Hygiene Measures When using do not eat or drink. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with eyes, skin and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	liquid	Odor	Acrylic
Appearance	white	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		
Melting point/ freezing point		
Boiling point/ boiling range	No information available	
Flash point	> 95 °C	Seta Closed Cup
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit 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. 0- 1.1	Not applicable
Water solubility	No information available	
Solubility(ies)	No information available	
Partition coefficient	No information available	
Autoignition temperature	>200	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
voe content	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization may occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Oxides of sulfur. Carbon oxides.

11. Toxicological Information**Information on likely routes of exposure****Product Information**

The product has not been tested

Inhalation

Avoid breathing vapors or mists. May cause irritation.

Eye contact

Severely irritating to eyes. Avoid contact with eyes.

IF ON SKIN

Irritating to skin. Avoid contact with skin.

Ingestion

Do NOT taste or swallow. Harmful if swallowed.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Propenoic acid, 2-phenoxyethyl ester 48145-04-6	= 4660 µL/kg (Rat)	= 2540 µL/kg (Rabbit)	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
2-Propenoic acid, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo- 5888-33-5	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- 162881-26-7	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Information on toxicological effects**Symptoms**

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Irritating to skin.

Serious eye damage/eye irritation

Risk of serious damage to eyes. Irritating to eyes.

Irritation

Irritating to skin. Irritating to eyes. May cause irritation of respiratory tract.

Sensitization

May cause an allergic skin reaction.

Mutagenic effects

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP
Titanium dioxide 13463-67-7	-	Group 28	-

OSHA
X

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	1205 mg/kg
ATEmix (dermal)	2186 mg/kg

12. Ecological Information

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Monofunctional Acrylate 86273-46-3	-	6.8: 96 h Danio rerio mg/L LC50 semi-static	-
2-Propenoic acid, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo- 5888-33-5	-	0.704: 96 h Danio rerio mg/L LC50 semi-static	-
Lactam	-	307: 96 h Danio rerio mg/L LC50 static	-
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- 162881-26-7	-	90: 96 h Danio rerio µg/L LC50 semi-static	-
Poly[oxy(methyl-1,2-ethanediyl)], α,α,α,α,α,α-1,2,3-propanetriyltr is[ω-[(1-oxo-2-propenyl)oxy]- 52408-84-1	-	5.74: 96 h Danio rerio mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects	No information available
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13. Disposal Considerations

Waste treatment methods

Waste treatment methods	Disposal should be in accordance with applicable regional, national and local laws and regulations. Should not be released into the environment.
Contaminated packaging	Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

~~14. Transport Information~~

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. Regulatory Information

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
2-Propenoic acid, 2-phenoxyethyl ester 48145-04-6	X	X	X	X	X	X	X	X
Monofunctional □ crylate 86273-46-3	X	X	X	X	X	-	-	X
□ titanium dioxide 13463-67-7	X	X	X	X	X	X	X	X
2-Propenoic acid, 1,7,7-trimethylbicyclo (2.2.1]hept-2-yl ester, exo- 5888-33-5	X	X	X	X	X	X	X	X
Lactam	X	X	X	X	X	X	X	X
Diphenyl-2,4,6-trimet hylbenzoyl phosphine oxide 75980-60-8	X	X	X	X	X	X	X	X
Oligomer#2 PROPRIETARY	X	X	X	X	X	X	X	X
□ crylated Resin / Oligomer	X	X	X	X	X	X	X	X
2-Propenoic acid, 2-(((butylamino)carbo nyl]oxy]ethyl ester 63225-53-6	X	X	X	-	X	-	X	X
Phosphine oxide, phenylbis(2,4,6-trime □ hylbenzoyl)- 162881-26-7	X	X	X	X	X	-	X	X
Poly(oxy(methyl-1,2- ethanediyl)), .alpha.,.alpha.,.alpha .-1,2,3-propanetriylt ris(.omega.-1(1-oxo-2- propenyl)oxy]- 52408-84-1	X	X	X	X	X	X	X	X

Legend Legend: —

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified 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

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%
2-Propenoic acid, 2-phenoxyethyl ester - 48145-04-6	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	Yes

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CAS No	Weight-%	HAPS data	voe Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
2-Propenoic acid, 2-phenoxyethyl ester	48145-04-6	10 - 35	This CAS number is listed as a glycol ether in SARA 313, and therefore is regarded as a HAP, (since it meets the general definition of glycol ethers).			

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen

U.S. State Right to Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-Propenoic acid, 2-phenoxyethyl ester 48145-04-6	X	-	X
Titanium dioxide 13463-67-7	X	X	X

U.S. EPA Label Information

EPA Pesticide registration number Not applicable

16. Other Information

<u>NFPA</u>	Health hazard 2	flammability 1	Instability 2	Physical and chemical properties -
<u>HMIS</u>	Health hazard 2	flammability 1	Physical hazards 2	Personal precautions X

Issuing Date 05-May-2020

Revision date 08-Mar-2021

Revision note

No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet