



Section 1. Identification

Product identifier

Product Identity	Chromasphere Varnish UV Ink
Other means of identification	Not Applicable

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

See Technical Data Sheet.

Details of the supplier of the safety data sheet

Company Name	Direct Color Systems 99 Hammermill Rd. Rocky Hill, CT 06067
Emergency	
24 hour Emergency Telephone No.	24/7 CHEMTREC 800-424-9300
Customer Service:	860-829-2244

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

Acute toxicity(oral), category 4;H302	Harmful if swallowed.
Skin corrosion/irritation category 2;H315	Causes skin irritation.
Serious eye damage / eye irritation, category 2;H319	Causes serious eye irritation.
Skin sensitizer category 1;H317	May cause an allergic skin reaction.
Specific target organ toxicity, repeated exposure category 1;H372	Causes damage to organs through prolonged or repeated exposure.
Aquatic toxicity (chronic), category 3;H412	Harmful to aquatic life with long lasting effects.

Label elements**Danger**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

[Prevention]

P260 Do not breathe dust, fume, mist, vapors or spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves, eye protection, and face protection.

[Response]

P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER, doctor or physician if you feel unwell.

P314 Get Medical advice or attention if you feel unwell.

P330 Rinse mouth.

P333+313 If skin irritation or a rash occurs: Get medical advice or attention.

P337+313 If eye irritation persists: Get medical advice or attention.



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P362+364 Take off contaminated clothing and wash it before reuse.

[Storage]

No GHS storage statements

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
2-propenoic acid, 3,3,5-trimethylcyclohexyl ester CAS Number: 86178-38-3 Synonyms: 2-propenoic acid, 3,3,5-trimethylcyclohexyl ester	10 - 30		No data available
Pentaerythritol, ethoxylated, esters with acrylic acid CAS Number: 51728-26-8 Synonyms: Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propen-1-yl)oxy]-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1)	10 - 30	Serious eye damage / eye irritation, category 2A;H319 Skin corrosion/irritation category 2;H315	No data available
2-Propenoic acid, 2-[2-(ethenylloxy)ethoxy]ethyl ester CAS Number: 86273-46-3 Synonyms: VEEA	10 - 30	Acute toxicity(oral), category 4;H302 Skin sensitizer category 1;H317 Aquatic toxicity (chronic), category 3;H412	No data available
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate CAS Number: 84434-11-7 Synonyms: Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	7 - 13	Skin sensitizer category 1B;H317 Aquatic toxicity (chronic), category 2;H411	No data available
2h-azepin-2-one, 1-ethenylhexahydro- CAS Number: 2235-00-9 Synonyms: Azepin-2-one, 1-ethenylhexahydro-, Monomer	7 - 13	Acute toxicity(oral), category 4;H302 Serious eye damage / eye irritation, category 2;H319 Acute toxicity(dermal), category 4;H312 Specific target organ toxicity, repeated exposure category 1;H372	No data available
2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester CAS Number: 2399-48-6 Synonyms: PROPENOIC ACID, (TETRAHYDRO-2-FURANYL)METHYL ESTER	7 - 13	Skin corrosion/irritation category 2;H315 Serious eye damage / eye irritation, category 2;H319	No data available
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propenyl)oxy] -	3 - 7	Not Classified	No data

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
CAS Number: 84170-74-1 Synonyms: Propoxylated Neopentyl Glycol Diacrylate Ester			available
Ethoxylated trimethylolpropane triacrylate CAS Number: 28961-43-5 Synonyms: Trimethylpropane, ethoxylated, acrylic acid ester	3 - 7	Serious eye damage / eye irritation, category 2;H319 Skin sensitizer category 1;H317	No data available

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

- General** In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.
- Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
- Eyes** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

- Overview** No specific symptom data available.
Treat symptomatically. See section 2 for further details.
- Eyes** Causes serious eye irritation.
- Skin** May cause an allergic skin reaction. Causes skin irritation.
- Ingestion** Harmful if swallowed.

Section 5. Fire-fighting measures

Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.
Do not breathe dust, fume, mist, vapors or spray.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Do not allow spills to enter drains or waterways.

Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.
Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.
See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information
See section 2 for further details. - [Storage]

Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
2235-00-9	2h-azepin-2-one, 1-ethenylhexahydro-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
2399-48-6	2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
28961-43-5	Ethoxylated trimethylolpropane triacrylate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
51728-26-8	Pentaerythritol, ethoxylated, esters with acrylic acid	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
84170-74-1	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propenyl)oxy] -	OSHA	No Established Limit
		ACGIH	No Established

CAS No.	Ingredient	Source	Value
			Limit
		NIOSH	No Established Limit
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
86178-38-3	2-propenoic acid, 3,3,5-trimethylcyclohexyl ester	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
86273-46-3	2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Exposure controls

Respiratory If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes Protective safety glasses recommended

Skin Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Liquid
Color	Colorless/Clear
Odor	Ester-like
Melting point / freezing point	No available information
Initial boiling point and boiling range	257°F 125°C
Flammability (solid, gas)	No available information
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	437°F 225°C, Test method: (Open/Close cup)
Auto-ignition temperature	No available information
Decomposition temperature	No available information
pH	No available information
Viscosity (cSt)	25cP @ 25C
Solubility in Water	No available information
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapor pressure (Pa)	No available information
Relative Density	No available information
Vapor Density	No available information
Evaporation rate (Ether = 1)	No available information
Oxidising properties	No available information
Explosive properties	No available information
Other information	No other relevant information.

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No available information

Conditions to avoid



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Avoid high temperatures and contact with incompatible material

Incompatible materials

No available information

Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
2-propenoic acid, 3,3,5-trimethylcyclohexyl ester - (86178-38-3)	No data available.	No data available.	No data available.	No data available.	No data available.
Pentaerythritol, ethoxylated, esters with acrylic acid - (51728-26-8)	No data available.	No data available.	No data available.	No data available.	No data available.
2-Propenoic acid, 2-[2-(ethenyoxy)ethoxy]ethyl ester - (86273-46-3)	No data available.	No data available.	No data available.	No data available.	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate - (84434-11-7)	> 5,000.00, Rat - Category: NA	> 2,000.00, Rat - Category: NA	No data available.	No data available.	No data available.
2h-azepin-2-one, 1-ethenylhexahydro- - (2235-00-9)	1,114.00, Rat - Category: 4	1,800.00, Rabbit - Category: 4	No data available.	No data available.	No data available.
2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester - (2399-48-6)	No data available.	No data available.	No data available.	No data available.	No data available.
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propenyl)oxy]] - (84170-74-1)	> 5,000.00, Rat -	> 2,000.00, Rat	No data	No data	No data



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Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
	Category: NA	- Category: NA	available.	available.	available.
Ethoxylated trimethylolpropane triacrylate - (28961-43-5)	>2,000.00, Rat - Category: 5	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
2235-00-9	2h-azepin-2-one, 1-ethenylhexahydro-	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
2399-48-6	2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
28961-43-5	Ethoxylated trimethylolpropane triacrylate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
51728-26-8	Pentaerythritol, ethoxylated, esters with acrylic acid	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
84170-74-1	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propenyl)oxy] -	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
86178-38-3	2-propenoic acid, 3,3,5-trimethylcyclohexyl ester	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
86273-46-3	2-Propenoic acid, 2-[2-(ethenyl)ethoxy]ethyl ester	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
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Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	1	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

Possible routes of entry:

Symptoms and effects, both acute and delayed:

No specific symptom data available.

Treat symptomatically.

Eyes Causes serious eye irritation.

Skin May cause an allergic skin reaction. Causes skin irritation.

Ingestion Harmful if swallowed.

Section 12. Ecological information

Toxicity

Harmful to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
2-propenoic acid, 3,3,5-trimethylcyclohexyl ester - (86178-38-3)	No data available.	No data available.	No data available.



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Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Pentaerythritol, ethoxylated, esters with acrylic acid - (51728-26-8)	No data available.	No data available.	No data available.
2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester - (86273-46-3)	No data available.	No data available.	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate - (84434-11-7)	1.89, Danio rerio	2.26, Daphnia magna	1.01, Desmodesmus subspicatus
2h-azepin-2-one, 1-ethenylhexahydro- - (2235-00-9)	318.00, Danio rerio	101.00, Daphnia magna	101.00, Desmodesmus subspicatus
2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester - (2399-48-6)	No data available.	No data available.	No data available.
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propenyl)oxy]] - - (84170-74-1)	2.70, Danio rerio	37.00, Daphnia magna	11.00, Pseudokirchneriella subcapitata
Ethoxylated trimethylolpropane triacrylate - (28961-43-5)	1.95, Danio rerio	70.70, Daphnia magna	2.20, Desmodesmus subspicatus

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations

Waste treatment methods

Observe all federal, provincial and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	Not Regulated	Not Regulated	Not Applicable
UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
Transport hazard class(es)	DOT Hazard Class: Not Regulated Sub Class: Not Applicable	IMDG: Not Regulated Sub Class: Not Applicable	Air Class: Not Regulated Sub Class: Not Applicable
Packing group	Not Regulated	Not Regulated	Not Regulated

Environmental hazards

Marine Pollutant: No;

Special precautions for user

No available information

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0002399-48-6	2-Propenoic acid, (tetrahydro-2-furanyl)methyl ester	Yes		ACTIVE
0086273-	2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester	Yes	PMN; S; 5E	ACTIVE



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CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
46-3				
0086178-38-3	2-propenoic acid, 3,3,5-trimethylcyclohexyl ester	Yes	PMN	ACTIVE
0002235-00-9	2h-azepin-2-one, 1-ethenylhexahydro-	Yes		ACTIVE
0028961-43-5	Ethoxylated trimethylolpropane triacrylate	Yes	XU	ACTIVE
0084434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No		
0051728-26-8	Pentaerythritol, ethoxylated, esters with acrylic acid	Yes	PMN; XU	ACTIVE
0084170-74-1	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propenyl)oxy] -	Yes	PMN; XU	ACTIVE

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim

all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

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