

Safety Data Sheet

Waterbase Pigment Ink (White)

Version: V2.0.0.1

Report No.: HGNM216GYN

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*Prepared according to EU regulation No. 2020/878

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

Product identifier

Product Name	DTF White Ink
Product Model	DTF-White-500
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
REACH Registration Number	-
UFI	No information available

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

Relevant identified uses	For inkjet printing.
Uses advised against	Please consult manufacturer.

Details of the supplier of the Safety Data Sheet

Name of the company	Distributor: ColDesi / Colman & Company, Inc.,
Address of the company	3634 131st Ave N., Clearwater, FL
Post code	33762
Telephone number	800-891-1094
Fax number	
E-mail address	

Emergency telephone number

Emergency telephone number	IN EMERGENCY, call CHEMTREC, in US or Canada, call 800-424-9300
Opening hours	Outside of US or Canada, call 703-527-3887

2 Hazards identification

CLP classification according to Regulation (EC) No. 1272/2008

According to Regulation (EC) No 1272/2008 and its amendments. Not classified as a dangerous substance.

GHS Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable
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Precautionary statements

◆ Prevention

Prevention	Not applicable
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◆ Response

Response	Not applicable
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◆ Storage

Storage	Not applicable
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◆ Disposal

Disposal	Not applicable
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Other hazards

◆ Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Glycerol	Not PBT/vPvB
Titanium dioxide	Not applicable

◆ Results of endocrine disrupting properties assessment

Results of endocrine disrupting properties assessment	Insufficient information, temporarily unable to evaluate
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◆ Other

	Not applicable.
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3 Composition/information on ingredients**Substance/mixture**

	Mixture
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Component	Weight % content (or range)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific Conc. Limits, M-factors
Water CAS: 7732-18-5 EC: 231-791-2 Index No.: -	80	Not Classified	-
Glycerol CAS: 56-81-5 EC: 200-289-5 Index No.: -	15	Not Classified	-
Titanium dioxide CAS: 13463-67-7 EC: 236-675-5 Index No.: 022-006-00-2	5	Not Classified	-

4 First-aid measures**Description of first aid measures**

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
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Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	No harm in general situation. First aid is not needed.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

Most important symptoms/effects, acute and delayed

1	Please see section 11.
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Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Misty water , alcohol-resistant foam, dry powder, carbon, dioxide, sand.
Unsuitable extinguishing media	Do not use a solid water stream as it may lead to liquid splash and hurt firefighters.

Specific hazards arising from the substance or mixture

1	Development of hazardous combustion gases or vapor possible in the event of fire.
2	Not considered a significant fire risk, however containers may burn.

Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

1	Use personal protective equipment,do not breathe gas/mist/vapour/spray.
2	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
3	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

1	Cut off the source of the leak as much as possible.
2	Keep leaks in a ventilated place.
3	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by

	bunding.
4	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
5	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.

7 Handling and storage

Precautions for safe handling

◆ Protective measures

1	Handling is performed in a well ventilated place.
2	Avoid contact with eyes.
3	Operators must be specially trained to strictly abide by the operating procedures.
4	It is recommended that operators wear self-priming filter dust masks and chemical safety glasses.

◆ Measures to prevent fire

1	Keep away from heat/sparks/open flames/ hot surfaces.
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◆ Measures to prevent aerosol and dust generation

1	Not applicable.
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◆ Advice on general occupational hygiene

1	Wash hands and face after using of the substances.
2	Replace the contaminated clothing immediately.

Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.
5	It is forbidden to use mechanical equipment and tools that are prone to sparks.
6	The storage area should be equipped with leakage emergency treatment equipment and suitable containment materials.

Specific end use(s)

1	In addition to use mentioned in the first parts, unforeseen other specific end uses.
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8 Exposure controls/personal protection

Control parameters

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m ³	ppm	mg/m ³
Glycerol	USA - OSHA	-	15	-	-
	South Korea	-	10	-	-
	Ireland	-	10	-	-
	Germany (DFG)	-	50	-	100
	Belgium	-	10	-	-
	Australia	-	10	-	-

Titanium dioxide	USA - OSHA	-	15	-	-
	South Korea	-	10	-	-
	Ireland	-	10	-	-
	France	-	11	-	-
	Denmark	-	6	-	12
	Australia	-	10	-	-

◆ Biological limit values

Biological limit values	No relevant regulations
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◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300.1~GBZ/T 300.160-2017; GBZ/T 300.161~GBZ/T 300.164-2018 Determination of toxic substances in workplace air (Series standard).

◆ Derived No effect level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Water	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Glycerol	Inhalation	No data available	No data available	56 mg/m ³	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Titanium dioxide	Inhalation	No data available	No data available	10 mg/m ³	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available


◆ Predicted No Effect Concentration (PNEC)

Predicted No Effect Concentration (PNEC)	No information available
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Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

Personal protection equipment

General requirement	
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with vapour or dust, tightly fitting safety goggles.

Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, wear dust proof mask or gas defence mask.
Skin and body protection	In general situation, skin and body protection are not needed.

9 Physical and chemical properties and safety characteristics

Physical and chemical properties

Physical state	Liquid
Colour	White
Odor	Weak odor
Odor threshold	No information available
pH	7~10
Melting point/freezing point(°C)	-18
Initial boiling point and boiling range(°C)	95~110
Flash point(Closed cup,°C)	> 130
Evaporation rate	No information available
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit: No information available; Lower limit: No information available
Vapor pressure	No information available
Vapor density(Air = 1)	No information available
Relative density(Water=1)	No information available
Solubility	No information available
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available
Viscosity	3.0-5.0 cP
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing
Particle characteristics	Not applicable

10 Stability and reactivity

Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen. In contact with oxidants causes severe reactions, and may cause a fire or explosion.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Strong oxides, strong acids, strong bases.

Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
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11 Toxicological information

Acute toxicity

Component	LD ₅₀ (oral)	LD ₅₀ (dermal)	LC ₅₀ (inhalation,4h)
Glycerol	12600mg/kg(Rat)	> 10000mg/kg(Rabbit)	No information available

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Water	Not Listed	Not Listed
Glycerol	Not Listed	Not Listed
Titanium dioxide	Category 2B	Not Listed

Endocrine disrupting properties

Endocrine disrupting properties	No information available
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Others

Waterbase Pigment Ink (White)	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

12 Ecological information

Acute aquatic toxicity

Component	Fish	Crustaceans	Algae
Glycerol	LC ₅₀ : 68100mg/L (96h)(Fish)	No information available	No information available

Chronic aquatic toxicity

Chronic aquatic toxicity	No information available
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Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
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Water	Low	Low
Titanium dioxide	High	High

Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Water	Low	Log Kow=-1.38
Titanium dioxide	Low	BCF=10

Mobility in soil

Component	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
Water	Low	14.3
Titanium dioxide	Low	23.74

Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Glycerol	Not PBT/vPvB
Titanium dioxide	Not applicable

Endocrine disrupting properties

Endocrine disrupting properties	No information available
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13 Disposal considerations

Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

Label and Mark

Transporting Label	Not applicable
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IMDG-CODE

IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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IATA-DGR

IATA-DGR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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UN-ADR

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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15 Regulatory information

International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIIC	ENCS
Water	√	√	√	√	√	√	√	√	√
Glycerol	√	√	√	√	√	√	√	√	√
Titanium dioxide	√	√	√	√	√	√	√	√	√

[EINECS] European Inventory of Existing Commercial Chemical Substances

[TSCA] United States Toxic Substances Control Act Inventory

[DSL] Canadian Domestic Substances List

[IECSC] China Inventory of Existing Chemical Substances

[NZIoC] New Zealand Inventory of Chemicals

[PICCS] Philippines Inventory of Chemicals and Chemical Substances

[KECI] Korea Existing Chemicals Inventory

[AIIC] Australia. Inventory of Industrial Chemicals (AIIC)

[ENCS] Japan Inventory of Existing & New Chemical Substances

European chemical inventory

Component	A	B	C	D	E	F	G
Water	x	x	x	√	x	x	x
Glycerol	x	x	x	√	√	x	x
Titanium dioxide	x	x	x	√	√	√	x

[A] Candidate list of Substances of Very High Concern for authorization under EU REACH regulation

[B] Substances requiring authorisation under EU REACH regulation

[C] Substances restricted under EU REACH

[D] Pre-registered substances under EU REACH

[E] Registered substances under EU REACH

[F] Substance Evaluation – CoRAP under EU REACH

[G] List of priority substances under EU water policy (Directive 2455/2001/EC)

Note:

“√” Indicates that the substance included in the regulations.

“x” No data or not included in the regulations.

16 Other information

Information on revision

Creation Date	2021/07/19
Revision Date	2021/07/19
Reason for revision	-

Reference

[1] IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.

[2] IARC, website: <http://www.iarc.fr/>.

[3] OECD: The Global Portal to Information on Chemical Substances, website: <https://www.echemportal.org/echemportal/substancesearch/index.action>.

[4] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.

[5] NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.

[6] EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.

[7] U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.

[8] Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG	International Maritime Dangerous Goods
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC ₅₀	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD ₅₀	Lethal Dose 50%	NTP	National Toxicology Program
EC ₅₀	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC _x	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P _{OW}	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

Disclaimer

This Safety Data Sheet (SDS) was prepared according to REACH Regulation. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.