

Version 6.0

Issue Date : 11/19/2020 Ref. 130000128531

Revision Date : 04/30/2020

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ARTISTRI® BRITE P5200 MAGENTA PIGMENT INK

Product Use : Printing ink

Restrictions on use : Do not use product for anything outside of the above specified uses.

Manufacturer/Supplier : DuPont

974 Centre Road

Wilmington, DE 19805, USA

Product Information : 1-302-996-8439

Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)

Transport Emergency : +1-800-424-9300 (outside the U.S. & Canada +1-703-527-3887)

# **SECTION 2. HAZARDS IDENTIFICATION**

### Product hazard category

Serious eye damage/eye irritation Category 2A Specific target organ toxicity - Category 2

repeated exposure

### Label content

Pictogram :



Signal word : Warning



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Hazardous warnings : Causes serious eye irritation.

May cause damage to organs through prolonged or repeated exposure.

(Kidney)

Hazardous prevention

measures

: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Wash skin thoroughly after handling. Wear eye protection/ face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. Get medical advice/ attention if you feel unwell. If eye irritation persists: Get medical advice/ attention.

Dispose of contents/ container to an approved waste disposal plant.

### Other hazards

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 15 - 25 %

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Ethane-1,2-diol	107-21-1	1 - 10 %
2-(2-(2-Butoxyethoxy)ethoxy)ethanol	143-22-6	1 - 3 %
2-Pyrrolidone	616-45-5	1 - 3 %

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## **SECTION 4. FIRST AID MEASURES**



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General advice : Never give anything by mouth to an unconscious person. When symptoms

persist or in all cases of doubt seek medical advice.

Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing

is irregular or stopped, administer artificial respiration. Get medical attention.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15

> minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before

re-use.

Eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty

of water, also under the eyelids, for at least 15 minutes. Get medical advice/

attention.

Ingestion : If swallowed, call a poison control centre or doctor immediately. Rinse mouth

with water. DO NOT induce vomiting unless directed to do so by a physician or

poison control center.

Most important

symptoms/effects, acute

and delayed

Protection of first-aiders

: No applicable data available.

Notes to physician : No specific intervention is indicated. Treat symptomatically.

: No applicable data available.

### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and

the surrounding environment.

Water spray, Dry chemical, Carbon dioxide (CO2)

Unsuitable extinguishing

media

: No applicable data available.

Specific hazards : Hazardous decomposition products formed under fire conditions. (see also

section 10) Avoid breathing decomposition products.

Special protective equipment

for firefighters

: Exposure to decomposition products may be a hazard to health. Wear self-

contained breathing apparatus for firefighting if necessary.



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Further information : Evacuate personnel to safe areas. Stop spill/release if it can be done with

minimal risk. Do not allow run-off from fire fighting to enter drains or water

courses.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Wear

suitable protective equipment.

Environmental precautions : Prevent further leakage or spillage if safe to do so. Prevent product from

entering drains. Clean contaminated floors and objects thoroughly while

observing environmental regulations.

Spill Cleanup : Contain spill. Soak up with inert absorbent material. Collect and contain

contaminated absorbent and dike material for disposal. Keep in suitable, closed containers for disposal. Ventilate the area. Clean contaminated floors

and objects thoroughly while observing environmental regulations.

Accidental Release Measures : Dispose of in accordance with local regulations.

#### SECTION 7. HANDLING AND STORAGE

Handling (Personnel) : Avoid inhalation, ingestion and contact with skin and eyes. Do not use in

areas without adequate ventilation. For personal protection see section

"Exposure controls/personal protection"

Handle in accordance with good industrial hygiene and safety practice. Keep container closed. Keep away from food and drink. Wash hands before eating,

drinking, or smoking. Remove contaminated clothing and protective

equipment before entering eating areas. Wash contaminated clothing before

re-use.

Handling (Physical Aspects) : Normal measures for preventive fire protection.

Dust explosion class : No applicable data available.

Storage : Keep containers tightly closed in a cool, well-ventilated place. Do not store or

consume food, drink or tobacco in areas where they may become contaminated with this material. Do not reuse empty container.



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Stable under normal conditions.

Storage period : No applicable data available.

Storage temperature : No applicable data available.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Ensure adequate ventilation. Maintain air concentrations below occupational

exposure standards. General mechanical ventilation is normally adequate but use local exhaust where necessary to maintain exposures below acceptable

limits.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required. When

workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe

respirator use limitations specified by the manufacturer.

Hand protection : Material: Impervious gloves

Additional protection: Gloves must be inspected prior to use., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough., The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., The exact break through time can be obtained from the protective glove producer and this has to be observed., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger

of cuts, abrasion, and the contact time.

Eye protection : Wear safety glasses or coverall chemical splash goggles.

Skin and body protection : Choose body protection in relation to its type, to the concentration and

amount of dangerous substances, and to the specific work-place. Lightweight protective clothing and safety shoes are recommended.

Exposure Guidelines
Exposure Limit Values

Ethane-1,2-diol				
TLV	(ACGIH)	25 ppm	TWA	
			Vapour	



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TLV	(ACGIH)	50 ppm	STEL Vapour
TLV	(ACGIH)	10 mg/m3	STEL Inhalable fraction, Aerosol only
PEL (Permissible Exposure Limit)	(OSHA)	50 ppm 125 mg/m3	C
AEL *	(DuPont)	10 mg/m3	8 & 12 hr. TWA Particulate.
AEL *	(DuPont)	50 ppm	8 & 12 hr. TWA Vapor.

2-(2-(2-Butoxyethoxy)ethoxy)ethanol	
No applicable data available.	

2-Pyrrolidone			
AEL *	(DuPont)	5 ppm	8 & 12 hr. TWA

<sup>\*</sup> AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

Physical state : liquid Form : liquid Color : red

Odor : not significant

Odor threshold : No applicable data available.

pH : 7.0 - 9.0

Melting point/freezing point : Freezing point

-13 °C (9 °F)

Boiling point/boiling range : Boiling point

100 °C (212 °F)

Flash point : > 93 °C

Evaporation rate : Slower than Ether



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Flammability (solid, gas) : No applicable data available.

Upper explosion limit : No applicable data available.

Lower explosion limit : No applicable data available.

Vapor pressure : 0.5 hPa

Vapour density : No applicable data available.

Specific gravity (Relative

density)

: 1.05

Water solubility : soluble

Solubility(ies) : No applicable data available.

Partition coefficient: n-

octanol/water

: No applicable data available.

Auto-ignition temperature : No applicable data available.

Ignition temperature : 401 °C

Decomposition temperature : No applicable data available.

Viscosity, kinematic : No applicable data available.

Viscosity, dynamic : No applicable data available.

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : The product is chemically stable under recommended conditions of storage,

use and temperature.

Stable at normal temperatures and storage conditions.

Possibility of hazardous

reactions

None reasonably foreseeable.

Conditions to avoid : Avoid extreme heat. Do not freeze.

Incompatible materials : Acids, bases and strong oxidizing agents



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Hazardous decomposition

products

: No decomposition if stored and applied as directed.

Under fire conditions:, Carbon monoxide, carbon dioxide and unburned

hydrocarbons (smoke).

### **SECTION 11. TOXICOLOGICAL INFORMATION**

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Further information : There is no data available for this product.

Ethane-1,2-diol

Inhalation : no data available

Inhalation

Dermal LD50 : > 3,500 mg/kg, Mouse

Oral LD50 : 1,650 mg/kg , Cat

Skin irritation : No skin irritation, Rabbit

Eye irritation : No eye irritation, Rabbit

Skin sensitization : Does not cause skin sensitisation., human

Repeated dose toxicity : Oral

Rat

Target Organs: Kidney

Kidney damage

Carcinogenicity : Not classifiable as a human carcinogen.

Animal testing did not show any carcinogenic effects.

Mutagenicity : Animal testing did not show any mutagenic effects.

Tests on bacterial or mammalian cell cultures did not show mutagenic

effects.

Reproductive toxicity : No toxicity to reproduction

No effects on or via lactation

Animal testing showed no reproductive toxicity.

Teratogenicity : Evidence suggests the substance is not a developmental toxin in

animals.



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2-(2-(2-Butoxyethoxy)ethoxy)ethanol

Dermal LD50 : 3,540 mg/kg , Rabbit

Oral LD50 : 5,170 mg/kg , Rat

Skin irritation : No skin irritation, Rabbit

Eye irritation : Risk of serious damage to eyes., Rabbit

Information given is based on data obtained from similar substances.

Skin sensitization : Does not cause skin sensitisation., Guinea pig

Information given is based on data obtained from similar substances.

Does not cause respiratory sensitisation., Guinea pig

Information given is based on data obtained from similar substances.

Repeated dose toxicity : Oral

Rat

NOAEL: 320 mg/kg

LOAEL: 1,270 mg/kgMethod: OECD Test Guideline 408

No toxicologically significant effects were found., Information given is

based on data obtained from similar substances.

Carcinogenicity : Not classifiable as a human carcinogen.

Animal testing did not show any carcinogenic effects.

Information given is based on data obtained from similar substances.

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic

effects.

Animal testing did not show any mutagenic effects.

Information given is based on data obtained from similar substances.

Reproductive toxicity : No toxicity to reproduction

Animal testing showed no reproductive toxicity.

Information given is based on data obtained from similar substances.

Teratogenicity : Animal testing showed no developmental toxicity.

2-Pyrrolidone

Inhalation : Rat

An LC50/inhalation/4h/rat could not be determined because no

mortality of rats was observed at the maximum achievable

concentration.



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Dermal LD50 : > 2,000 mg/kg, Rabbit

Oral LD50 : > 5,000 mg/kg, Rat

Skin irritation : No skin irritation, Rabbit

Minimal effects that do not meet the threshold for classification.

Eye irritation : Irritation to eyes, reversing within 7 days, Rabbit

Skin sensitization : Does not cause skin sensitisation., Mouse

Information given is based on data obtained from similar substances.

Repeated dose toxicity : Ingestion

Rat - 90 d

NOAEL: 207 mg/kgMethod: OECD Test Guideline 408

No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for

classification.

Mutagenicity : Animal testing did not show any mutagenic effects.

Tests on bacterial or mammalian cell cultures did not show mutagenic

effects.

Reproductive toxicity : Clear evidence of adverse effects on development, based on animal

experiments.

Animal testing did not show any effects on fertility.

This substance has been assigned a Specific Concentration Limit (SCL) of >= 3% for Reproductive toxicity Category 1B (H360D).

Teratogenicity : Foetal malformations

Reduced growth

#### Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.



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### **SECTION 12. ECOLOGICAL INFORMATION**

Aquatic Toxicity Ethane-1,2-diol

96 h LC50 : Pimephales promelas (fathead minnow) 72,860 mg/l

96 h ErC50 : Pseudokirchneriella subcapitata (green algae) 6,500 mg/l

48 h EC50 : Daphnia magna (Water flea) > 100 mg/l OECD Test Guideline 202

2-(2-(2-Butoxyethoxy)ethoxy)ethanol

96 h LC50 : Leuciscus idus (Golden orfe) 2,200 mg/l DIN 38412

72 h ErC50 : Desmodesmus subspicatus (green algae) > 612 mg/l

48 h EC50 : Daphnia magna (Water flea) 2,210 mg/l

21 d : NOEC Danio rerio (zebra fish) > 174.6 mg/l OECD Test Guideline

204

Information given is based on data obtained from similar substances.

21 d : NOEC Daphnia magna (Water flea) > 174.6 mg/l OECD Test

Guideline 211

Information given is based on data obtained from similar substances.

2-Pyrrolidone

96 h LC50 : Danio rerio (zebra fish) 4,600 - 10,000 mg/l OECD Test Guideline 203

72 h ErC50 : Desmodesmus subspicatus (green algae) > 500 mg/l DIN 38412

72 h EC10 : Desmodesmus subspicatus (green algae) 22.2 mg/l DIN 38412

48 h EC50 : Daphnia magna (Water flea) > 500 mg/l Directive 67/548/EEC, Annex

V, C.2.

**Environmental Fate** 

Ethane-1.2-diol

Biodegradability : Readily biodegradable. 90 - 100 % OECD Test Guideline 301

Bioaccumulation : Bioaccumulation is unlikely.

2-(2-(2-Butoxyethoxy)ethoxy)ethanol



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> Biodegradability : rapidly biodegradable OECD Test Guideline 301D

Readily biodegradable.

2-Pyrrolidone

Biodegradability Biodegradable OECD Test Guideline 302

Readily biodegradable.

Bioaccumulation Does not bioaccumulate.

Additional ecological information There is no data available for this product.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste disposal methods -

Product

: If recycling is not practicable, dispose of in compliance with local regulations.

Never place unused product down any indoor or out door drain.

Waste disposal methods -

Container

: Do not reuse empty container.

Contaminated/not cleaned containers should be treated/handled like product

waste

Dispose of container properly.

Refer to applicable Local, State/Provincial, and Federal Regulations, as well

as industry Standards.

Contaminated packaging : No applicable data available.

#### SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

Regulated by DOT/49CFR as Combustible Liquid when transported in a bulk package (>=119 gallons(450 litres)).

#### SECTION 15. REGULATORY INFORMATION

**TSCA** : In compliance with TSCA-active Inventory requirements for commercial

purposes.



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SARA 311/312 Hazard

classification

: Specific target organ toxicity (single or repeated exposure)

Serious eye damage or eye irritation

SARA 313 Regulated

Chemical(s)

: The following components are subject to reporting levels established by SARA Title III, Section 313: Ethane-1,2-diol, 2,2' -oxybisethanol, 2-(2-(2-

Butoxyethoxy)ethoxy)ethanol, 2-(2-Butoxyethoxy)ethanol

California Prop. 65 : This product can expose you to substances including Formaldehyde, which

is/are known to the State of California to cause cancer, and Ethane-1,2-diol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

#### SECTION 16. OTHER INFORMATION

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