

**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

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® XITE S1540 BLACK DYE SUBLIMATION 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
Skin sensitisation Category 1

Label content
Pictogram :



Signal word : Warning


ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
 Revision Date : 08/24/2018

Hazardous warnings : May cause an allergic skin reaction.

Hazardous prevention measures : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves.
 IF ON SKIN: Wash with plenty of soap and water.
 If skin irritation or rash occurs: Get medical advice/ attention.
 Wash contaminated clothing before reuse.
 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: 20 - 30 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
2-Pyrrolidone	616-45-5	1 - 5 %
N-(2-chloroethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]-N-ethyl-m-toluidine	63741-10-6	1 - 5 %
N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazol-2-yl)diazenyl]aniline	70693-64-0	1 - 5 %

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

SECTION 4. FIRST AID MEASURES

**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

- 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 : No applicable data available.
- Protection of first-aiders : No applicable data available.
- Notes to physician : No specific intervention is indicated. Treat symptomatically.

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.



ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
 Revision Date : 08/24/2018

Special protective equipment for firefighters : Exposure to decomposition products may be a hazard to health. Wear self-contained breathing apparatus for firefighting if necessary.

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.



ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
 Revision Date : 08/24/2018

- 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. 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


ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK

Version 2.6

Issue Date : 11/19/2020
 Revision Date : 08/24/2018

Ref. 130000145891

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

**Exposure Guidelines
 Exposure Limit Values**

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

N-(2-chloroethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]-N-ethyl-m-toluidine			
No applicable data available.			

N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazol-2-yl)diazenyl]aniline			
No applicable data available.			

* 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 : black

Odor : Slight odour

Odor threshold : No applicable data available.

pH : No applicable data available.

Melting point/range : No applicable data available.

Boiling point/boiling range : No applicable data available.

Flash point : > 100 °C

Evaporation rate : No applicable data available.

**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

Flammability (solid, gas) : No applicable data available.
Upper explosion limit : No applicable data available.
Lower explosion limit : No applicable data available.
Vapour Pressure : No applicable data available.
Vapour density : No applicable data available.
Density : 1.0600 g/cm³
Specific gravity (Relative density) : No applicable data available.
Water solubility : dispersible
Solubility(ies) : No applicable data available.
Partition coefficient: n-octanol/water : No applicable data available.
Auto-ignition temperature : No applicable data available.
Decomposition temperature : No applicable data available.
Viscosity, kinematic : No applicable data available.
Viscosity, dynamic : No applicable data available.
% Volatile : 88.68 %WT

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.

**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

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

Incompatible materials : Acids, bases and strong oxidizing agents

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**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

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

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.

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

Oral LD50 : 8,000 mg/kg , Rat

Skin irritation : No skin irritation, Rabbit

Eye irritation : Eye irritation, Rabbit

Skin sensitization : Does not cause skin sensitisation., Mouse
Information given is based on data obtained from similar substances.

Repeated dose toxicity : Oral
Rat
-
NOAEL: 207 mg/kg Method: OECD Test Guideline 408
Kidney 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
Animal testing showed no reproductive toxicity.

**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

N-(2-chloroethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]-N-ethyl-m-toluidine

Skin sensitization : May cause sensitisation by skin contact., Guinea pig
Information given is based on data obtained from similar substances.

N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazol-2-yl)diazenyl]aniline

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

Oral LD50 : > 2,000 mg/kg , Rat

Skin irritation : No skin irritation, Rat

Eye irritation : No eye irritation, Rabbit

Skin sensitization : Probability or evidence of high skin sensitisation rate in humans, Guinea pig
Information given is based on data obtained from similar substances.

Mutagenicity : Animal testing did not show any mutagenic effects.
Genetic damage in cultured bacterial cells was observed in some laboratory tests but not in others.
Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.

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.

SECTION 12. ECOLOGICAL INFORMATION**Aquatic Toxicity**

2-Pyrrolidone

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


ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
 Revision Date : 08/24/2018

48 h EC50 : Daphnia magna (Water flea) > 500 mg/l Directive 67/548/EEC, Annex V, C.2.

N-(2-chloroethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]-N-ethyl-m-toluidine

96 h LC50 : Gobiocypris rarus (rare gudgeon) > 100 mg/l OECD Test Guideline 203
 No acute toxicity effects at concentrations up to the limit of aqueous solubility

72 h ErC50 : Desmodesmus subspicatus (green algae)
 No acute toxicity effects at concentrations up to the limit of aqueous solubility
 Information given is based on data obtained from similar substances.

48 h EC50 : Daphnia magna (Water flea)
 No acute toxicity effects at concentrations up to the limit of aqueous solubility
 Information given is based on data obtained from similar substances.

N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazol-2-yl)diazenyl]aniline

96 h LC50 : Oncorhynchus mykiss (rainbow trout) OECD Test Guideline 203
 No acute toxicity effects at concentrations up to the limit of aqueous solubility

72 h EC50 : Desmodesmus subspicatus (green algae) OECD Test Guideline 201
 No acute toxicity effects at concentrations up to the limit of aqueous solubility

72 h NOEC : Desmodesmus subspicatus (green algae)
 Aquatic toxicity is unlikely due to low solubility.

48 h EC50 : Daphnia magna (Water flea) OECD Test Guideline 202
 No acute toxicity effects at concentrations up to the limit of aqueous solubility

Environmental Fate

2-Pyrrolidone

Biodegradability : Biodegradable
 Readily biodegradable.

Bioaccumulation : Bioaccumulation is unlikely.

**ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK**

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

N-(2-chloroethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]-N-ethyl-m-toluidine

Bioaccumulation : Bioaccumulation is unlikely.
Information given is based on data obtained from similar substances.

N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazol-2-yl)diazenyl]aniline

Bioaccumulation : Bioaccumulation is unlikely.

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.

SECTION 15. REGULATORY INFORMATION

TSCA : On the inventory, or in compliance with the inventory

SARA 311/312 Hazard classification : Respiratory or skin sensitisation



ARTISTRI® XITE S1540 BLACK DYE SUBLIMATION INK

Version 2.6

Issue Date : 11/19/2020 Ref. 130000145891
Revision Date : 08/24/2018

SARA 313 Regulated Chemical(s) : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65 : This product does not contain any substances requiring a warning under the Safe Drinking Water and Toxic Enforcement Act.

SECTION 16. OTHER INFORMATION

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Revision Date : 08/24/2018

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