

# SAFETY DATA SHEET

EDX Cyan

## Section 1. Identification

**Product no.** : 1398364  
**Product name** : EDX Cyan

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

**Identified uses** : Printing inks, coatings, toners, and related materials

**Uses advised against** : Not available

**Manufacturer** : INX Digital Czech a.s.  
Do Certous 2621/13 - Hall I2  
193 00 Prague 20 - Horni Pocernice,  
Czech Republic

**Supplier's details** : INX Digital Czech a.s.  
Do Certous 2621/13 - Hall I2  
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+420 326 374 900

**24 Hour Emergency Phone** : +420 224 919 293 (Czech Toxicology info center)  
**SDS Email Information** : MSDS@inxintl.com

## Section 2. Hazards identification

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
TOXIC TO REPRODUCTION (Fertility) - Category 1B  
TOXIC TO REPRODUCTION (Unborn child) - Category 1B  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Combustible liquid.  
Causes serious eye irritation.  
Causes skin irritation.  
May damage fertility or the unborn child.  
May cause respiratory irritation.

### Precautionary statements

**General** : Read label before use.  
**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.  
**Response** : IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical 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 attention.  
**Storage** : Store locked up. Store in a well-ventilated place. Keep cool.  
**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.  
**Supplemental label elements** : None known.  
**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Dipropylene glycol dimethyl ether	35 - 50	111109-77-4
Diethylene Glycol Diethyl Ether	25 - 35	112-36-7
Butanolide, 4-	15 - 20	96-48-0
Tetraethylene Glycol Dimethyl Ether	3 - 5	143-24-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occur personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Causes skin irritation.
- Ingestion** : Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Indication of immediate medical attention and special treatment needed, if necessary**

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

**Extinguishing media**

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. in container for disposal according to local regulations (see Section 13) Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** :
- Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** :
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** :
- Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None.

- Appropriate engineering controls** :
- Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a r exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### **Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check duri protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be involved and should be approved by a specialist before handling this prod

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with is necessary. Respirator selection must be based on known or anticipated exposure levels of the selected respirator.

## **Section 9. Physical and chemical properties**

### **Appearance**

**Physical state** : liquid  
**Color** : Blue.

**Odor** : Not available.  
**Odor threshold** : Not available.  
**pH** : Not available.  
**Melting point** : Not available.  
**Boiling point** : 356.02 - 400.01 °F (180.01 - 204.45 °C)

<b>Flash point</b>	:	> 60 - 93 °C (140.00 - 199.40 °F) Not Measured. Flashpoint is estimated to be >60 to 93°C (>140 to 200°F).
<b>Evaporation rate</b>	:	Not available.
<b>Flammability (solid, gas)</b>	:	Not available.
<b>Lower and upper explosive (flammable) limits</b>	:	<b>Lower:</b> Not available. <b>Upper:</b> Not available.
<b>Vapor pressure</b>	:	Not available.
<b>Vapor density</b>	:	Not available.
<b>Density</b>	:	0.994 g/cm <sup>3</sup>
<b>Relative density</b>	:	1
<b>Solubility</b>	:	Not available.
<b>Partition coefficient: n-octanol/water</b>	:	Not available.
<b>Auto-ignition temperature</b>	:	Not available.
<b>Decomposition temperature</b>	:	Not available.
<b>Viscosity</b>	:	<b>Dynamic:</b> Not available. <b>Kinematic:</b> Not available.
<b>Volatile.</b>	:	87.39 %(m) Weight % 88.68 %(V) Volume %
<b>VOC %</b>	:	87.39 %(m) Weight % 88.68 %(V) Volume %
<b>Coating VOC</b>	:	7.24 lb/gal 869 g/l

## Section 10. Stability and reactivity

<b>Reactivity</b>	:	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	:	The product is stable.
<b>Possibility of hazardous reactions</b>	:	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>Incompatible materials</b>	:	Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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Diethylene Glycol Diethyl Ether				
	LD50 Oral	Rat	4,970 mg/kg	-
Butanolide, 4-				
	LD50 Oral	Rat	1,540 mg/kg	-
	LD50 Oral	Rat	1,580 mg/kg	-
Tetraethylene Glycol Dimethyl Ether				
	LD50 Oral	Rat	5,140 mg/kg	-

**Conclusion/Summary** : Not available.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Diethylene Glycol Diethyl Ether	Eyes - Moderate irritant	Rabbit	-		-
Butanolide, 4-	Skin - Severe irritant	Rabbit	-		-
Tetraethylene Glycol Dimethyl Ether	Eyes - Mild irritant	Rabbit	-		-

**Conclusion/Summary**

**Skin** : Not available.

**Eyes** : Not available.

**Respiratory** : Not available.

### Sensitization

**Conclusion/Summary**

**Skin** : Not available.

**Respiratory** : Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
Butanolide, 4-		3	

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Propane, oxybis[methoxy-			

**Specific target organ toxicity (repeated exposure)****Aspiration hazard**

Not available.

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : Irritating to mouth, throat and stomach.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations  
**Ingestion** : Adverse symptoms may include the following:  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Potential chronic health effects**

<b>Conclusion/Summary</b>	:	Not available.
<b>General</b>	:	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	:	No known significant effects or critical hazards.
<b>Mutagenicity</b>	:	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	May damage the unborn child.
<b>Developmental effects</b>	:	No known significant effects or critical hazards.
<b>Fertility effects</b>	:	May damage fertility.

**Numerical measures of toxicity****Acute toxicity estimates**

Not available.

**Section 12. Ecological information****Toxicity**

Product/ingredient name	Result	Species	Exposure
Diethylene Glycol Diethyl Ether	Acute LC50 10,000,000 µg/l Marine water	Fish - Bleak	96 h

**Conclusion/Summary** : Not available.

**Persistence and degradability**

**Conclusion/Summary** : Not available.

**Mobility in soil**

<b>Soil/water partition coefficient (KOC)</b>	:	Not available.
<b>Other adverse effects</b>	:	No known significant effects or critical hazards.

**Section 13. Disposal considerations**

- Disposal methods** :
- The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all time protection and waste disposal legislation and any regional local authority Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully comply jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

Regulatory information	Proper shipping name	UN - Number	Hazard classification	Packing group	Additional information
IATA	Not Restricted.			-	
IMDG	Not Restricted.			-	
DOT Classification	Not Restricted.			-	
Mexico Classification	Not Restricted.			-	
TDG Class	Not Restricted.			-	
DOT Classification	Not Restricted.			-	

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):**  
All components are listed or exempted.

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed

**SARA 302/304**  
Not applicable.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Fire hazard  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

### Composition/information on ingredients

Name	%	Classification
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Dipropylene glycol dimethyl ether	35 - 50	312 DELAY HLTH312 IMMED HLTH312 FIREF, AH
Diethylene Glycol Diethyl Ether	25 - 35	F, AH
Butanolide, 4-	15 - 20	312 IMMED HLTHAH
Tetraethylene Glycol Dimethyl Ether	3 - 5	AH, CH

**California Prop. 65**

WARNING: This product contains less than 1% of a chemical known to the Sta reproductive harm.

**International regulations**

**International lists** :

- Australia inventory (AICS):** Not determined.
- Canada inventory (DSL/NDSL):** Not determined.
- China inventory (IECSC):** Not determined.
- Korea inventory:** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.
- Europe inventory:** Not determined.
- Japan inventory:** Not determined.
- Canada inventory (DSL/NDSL):** Not determined.

<b>Section 16. Other information</b>
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**History**

**Date of printing** : 06/04/2015  
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**Prepared by** : MSDS@inxintl.com  
**References** : Not available.

**Notice to reader**

*To the best of our knowledge, the information contained herein is accurate its subsidiaries, assumes any liability whatsoever for the accuracy or co determination of suitability of any material is the sole responsibility o should be used with caution. Although certain hazards are described herei that exist.*