

# Product name

## Arctic Fox

## Chemistry-2x

# Safety Data Sheet

according to Regulation (EC) No. 453/2010

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Mixture
Product name	: Arctic Fox Chemistry-2x
Type of product	: Laboratory Chemical
Product group	: Trade Product

#### 1.2. Relevant identified uses of the substances or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec	: For research use only
Use of the substance/mixture	: Amplification of DNA
Function or use category	: Use as laboratory reagent; Laboratory chemicals; Scientific research and development

##### 1.2.2. Uses advised against

Not for consumer use. Not for use in diagnostic procedures
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#### 1.3. Details of the supplier of the safety data sheet

Molecular Biology Systems  
 Diazweg 7  
 4462 HG Goes  
 The Netherlands  
 T +31 11326 81 10

#### 1.4. Emergency Telephone Number

##### Emergency number:

Emergency number	: Chemtrec US: (800) 424-9300 Chemtrec EU: 001 (202) 483-7616
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance to mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not a hazardous substance or mixture
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#### 2.2. Label Elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)	: None
Signal word (CLP)	: None
Hazard statements (CLP)	: None
Precautionary statements (CLP)	: None

### 2.3. Other hazards

Not known

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Mixture

### 3.2. Mixture

Chemical Name	CAS-No.	Concentration (% w/w)
propane-1,2-diol	57-55-6	>= 1 - < 10
glycerol	56-81-5	>= 1 - < 10

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: Move to fresh air. If symptoms persist, call a physician.
First-aid measures after skin contact	: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
First-aid measures after eye contact	: Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First-aid measures after ingestion	: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: No information available
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### 4.3. Indication of any immediate medical attention and special treatment needed

No information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:

### 5.2. Special hazards arising from the substance or mixture

Exposure to decomposition products may be a hazard to health.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment.  
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

### 6.2. Environmental precautions

No additional information

### 6.3. Methods and material for containment and cleaning up

Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

No additional information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Normal measures for preventative fire protection.
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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: -20 °C
Incompatible products	: No information available.
Incompatible materials	: No information available.

### 7.3. Specific end use(s)

Laboratory reagent

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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Ingredients	CAS-No.	Value type (form of exposure)	Control parameters / Permissible concentration	Basis
Propane-1,2-diol	57-55-6	TWA	10 mg/m <sup>3</sup>	US WEEL
Glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (mist, total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Total)	10 mg/m <sup>3</sup>	OSHA P0
		TW A (Respirable fraction)	5 mg/m <sup>3</sup>	OSHA P0
		TWA	10 mg/m <sup>3</sup>	ACGIH
		TWA (Mist - total dust)	10 mg/m <sup>3</sup>	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m <sup>3</sup>	OSHA P0

## 8.2. Exposure controls

Materials for protective clothing	: No information available
Hand protection	: 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. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Eye protection	: Safety glasses
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals
Respiratory protection	: No information available
Environmental exposure controls	: Keep away from food and drink. When using do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: 7.0 – 9.0
Relative evaporation rate (butylacetate =1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapor pressure at 20°C	: No data available
Relative density	: No data available
Solubility	: soluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

## 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3. Possibility of hazardous reactions

Stable under recommended storage conditions.  
Hazardous decomposition products formed under fire conditions.

#### **10.4. Conditions to avoid**

No data available.

#### **10.5. Incompatible materials**

No data available

#### **10.6. Hazardous decomposition products**

No decomposition if stored and applied as directed.

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

Acute toxicity	<p>: Not classified based on available information.</p> <p><b>Ingredients:</b>  <b>propane-1,2-diol:</b>          Acute oral toxicity : LD50 Oral (Rat): 20,000 mg/kg          Acute dermal toxicity : LD50 Dermal (Rabbit): 20,800 mg/kg  <b>glycerol:</b>          Acute oral toxicity : LD50 Oral (Rat): 12,000 mg/kg          Acute dermal toxicity : LD50 Dermal (Rabbit): 10,000 mg/kg</p> <p><b>Skin corrosion/irritation</b>          Not classified based on available information.</p> <p><b>Product:</b>          Remarks:          May cause skin irritation in susceptible persons.</p> <p><b>Ingredients:</b>  <b>glycerol:</b>          Species: Rabbit Exposure time: 24 h Result: Mild skin irritation</p> <p><b>Serious eye damage/eye irritation</b>          Not classified based on available information.</p> <p><b>Product:</b>          Remarks:          May irritate eyes.</p> <p><b>Ingredients:</b>  <b>glycerol:</b>          Species: Rabbit Exposure time: 24 h Result: Mild eye irritation</p> <p><b>Respiratory or skin sensitization</b>          Skin sensitization: Not classified based on available information.          Respiratory sensitization: Not classified based on available information.</p> <p><b>Germ cell mutagenicity</b>          Not classified based on available information.</p> <p><b>Carcinogenicity</b>          Not classified based on available information.</p> <p><b>IARC</b> No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  <b>OSHA</b> No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  <b>NTP</b> No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.</p>
Acute Oral Toxicity	<p>: No data available          Acute toxicity estimate: &gt; 5,000 mg/kg          Method: Calculation method</p>

Reproductive toxicity	: Not classified based on available information.
Specific target organ toxicity (single exposure)	: Not classified based on available information.
Specific target organ toxicity (repeated exposure)	: Not classified based on available information.
Aspiration hazard	: Not classified based on available information.

## SECTION 12: Ecological information

### 12.1. Toxicity

Toxicity - Aquatic invertebrates	: No data available
Toxicity - Fish	: No data available
Toxicity - Algae	: No data available
Toxicity - Sediment Compartment	: No data available
Toxicity - Terrestrial Compartment	: No data available
Ingredient:	Propane-1,2-diol
Toxicity - Fish	: NOEC (Pimephales promelas (fathead minnow)): 52,930 mg/l Exposure time: 96 h
Toxicity - Aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h
Ingredient:	Glycerol
Toxicity - Fish	: LC0 (Leuciscus idus (Golden orfe)): > 250 mg/l Exposure time: 48 h

### 12.2. Persistence and degradability

Persistence and degradability	: No data available
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### 12.3. Bioaccumulative potential

Bioaccumulative potential	: No data available
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### 12.4. Mobility in soil

Ecology - soil	: No data available
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### 12.5. Results of PBT an vPvB assessment

No data available
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### 12.6. Other adverse effects

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods



Waste disposal recommendations

: Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Ingredients	CAS-No.	Component RQ (lbs)
	26628-22-8	1000

#### 15.1.1. EU-Regulations

No information available

#### 15.1.2. National regulations

##### EPCRA - Emergency Planning and Community Right-to-Know

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : 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.

##### US State Regulations

**California Prop. 65** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

##### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

### 15.2. Chemical safety assessment

No information available

## SECTION 16: Other information

## Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; EC<sub>x</sub> - Concentration associated with x% response; EL<sub>x</sub> - Loading rate associated with x% response; EmS - Emergency Schedule; ErC<sub>x</sub> - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC<sub>50</sub> - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC<sub>50</sub> - Lethal Concentration to 50 % of a test population; LD<sub>50</sub> - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods