

**Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1. Product Identifier****Product form:** mixture**Trade name:** Chemink® IK50F; IK50S; IK51F; IK51S.**1.2. Relevant identified uses of the substance or mixture and uses against****1.2.1. Relevant identified uses of the substance or mixture:**

Ink designed for manufacturing chemical indicators for Formaldehyde sterilization processes and for printing in Serigraphy (S), Flexography (F) and other printing techniques.

**1.2.2. Uses advised against:**

Do not use for purposes other than manufacture of chemical indicators.

**1.3. Details of the supplier of the safety sheet****Manufacturer:** Terragene S.A.**Address:** Ruta Nacional N° 9, Km 280 - CP 2130 - Parque Industrial Micropi - Alvear - Santa Fe - Argentina**Produced by:** QA&RA Department**Info Telephone:** +54 341 5587007 | 5587008 | 5587009**E-mail:** [info@terragene.com](mailto:info@terragene.com)**Web Page:** [www.terragene.com](http://www.terragene.com)**1.4. Emergency telephone**

24-hour Emergency Number: Chemtrec International: +17035273887

**Section 2: HAZARDS IDENTIFICATION****2.1. Classification of the substance or mixture.**

The product is classified as dangerous according to Regulation (EC) No. 1272/2008 (CLP).

**CLASSIFICATION:**

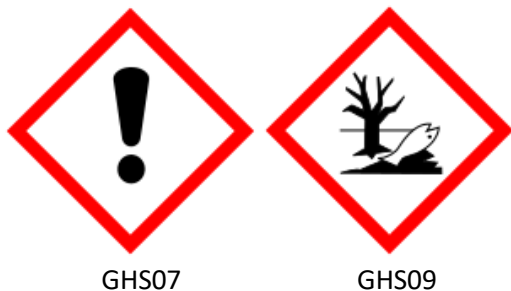
- STOT SE 3; H336
- Aquatic Chronic 1; H410

Adverse physicochemical, human health and environmental effects:

No information available.

**2.2. Label elements**

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

**2.2.1. Hazard pictograms****2.2.2 Signal word**

Warning.

**2.2.3. Hazard statements**

H336: May cause drowsiness or dizziness.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

**2.2.4. Precautionary statements**

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

**2.2.5. Supplemental Hazard information (EU):**

Not applicable.

**2.3. Other hazards**

PBT: not yet assessed.

VPvB: not yet assessed.

Other hazards: no endocrine disruptor substances present or other hazards.

**Section 3: COMPOSITION/ INFORMATION ON INGREDIENTS****3.1. Substance**

Not applicable.

**3.2. Mixture**

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Regulation (EC) No. 1272/2008 (CLP)

<b>Ingredients</b>	<b>CASNum ber</b>	<b>Content %</b>	<b>EC Number</b>	<b>Classification according to Regulation (EC) No. 1272/2008 (CLP)</b>
2-(2-butoxyethoxy)- ethanol	112-34-5	1-5%	203-961-6	Eye Irrit. 2; H319
Propyleneglycol monomethyl ether	107-98-2	1-5%	203-539-1	Flam. Liq. 3; H226 STOT SE 3; H336
1-dodecanol	9002-92-0	<1%	500-002-6	Acute Tox.4; H302 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
disodium 3,3'-(biphenyl- 4,4'-diyl)diazene-2,1- diyl)bis(4- aminonaphthalene-1- sulfonate)	573-58-0	<0,1%	209-358-4	Carc. 1B; H350 Repr. 2; H361d

Comments: Exact concentrations are withheld as trade secret.

**Section 4: FIRST AID MEASURES****4.1. Description of first aid measures****4.1.1. General:**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

**4.1.2. In case of ingestion:**

If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Induce vomiting.

**4.1.3. In case of eye contact:**

Flush immediately with water for 15 minutes and seek medical attention if irritation develops.

**4.1.4. In case of skin contact:**

Flush immediately with water. Remove the contaminated clothes.

**4.1.5. In case of inhalation:**

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

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

It might be harmful in contact with skin and eyes.

**4.3. Indication of any immediate medical attention and special treatment needed**

Call a doctor or physician.

**Section 5: FIREFIGHTING MEASURES****5.1. Extinguishing Media**

Suitable extinguishing media: Carbon dioxide (CO<sub>2</sub>), dry chemical powder or foam.

Unsuitable extinguishing media: None known.

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

N/A

**5.3. Advice for firefighter**

Firefighters should wear self-contained breathing apparatus and full protective gear.

**Section 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Avoid contact with the material during the manipulation. Use goggles, latex gloves, splash apron or lab coat.

**6.1.1. For non-emergency personnel**

Wear suitable gloves. Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

Wear suitable gloves. Ventilate area.

**6.2. Environmental precautions**

Do not discharge into drains or rivers.

**6.3. Methods for containment and cleaning up**

Collect as much of the spilled material as possible. Place in a close container approved for transportation by appropriate authorities. Clean up residue. Seal container. Dispose of collected material as soon as possible.

**6.4. Reference to other sections**

Section 8 and 13.

**Section 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Precautionary for safe handling: Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

## 7.2. Conditions for safe storage, including any incompatibilities

Incompatible products: unknown.

Keep container tightly closed in a dry and cool place.

Store in cool, well ventilated area.

Keep away from sources of ignition.

Temperatures: 15 – 25 °C

Relative humidity: 25 – 75 %

Do not freeze.

## 7.3. Specific end use(s)

Manufacturing chemical indicators for Formaldehyde sterilization processes, Serigraphy (S), Flexography (F) and other printing techniques.

# Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

## 8.1. Control parameters

### 8.1.1. Occupational Exposure Limits

Indicative occupational exposure limit values (IOELVs) from Commission Directive 2000/39/EC.

2-(2-butoxyethoxy) ethanol – CAS No. 112-34-5:

- OEL Type: Long-term Exposure Limit (LTEL) 67.5 mg/m<sup>3</sup>; 10.0 ppm.
- OEL Type: Short-term Exposure Limit (STEL) 101.2 mg/m<sup>3</sup>; 15.0 ppm.

Propyleneglycol monomethyl ether – CAS No. 107-98-2:

- OEL Type: Long-term Exposure Limit (LTEL) 375.0 mg/m<sup>3</sup>; 100.0 ppm.
- OEL Type: Short-term Exposure Limit (STEL) 568.0 mg/m<sup>3</sup>; 150.0 ppm.

- Skin designation<sup>1</sup>: yes.

Disodium 3,3'-(biphenyl-4,4'-diyl)diidiazene-2,1-diyl) bis(4-aminonaphthalene-1-sulfonate)  
- CAS No. 573-58-0:

- Substance of very high concern (SVHC) and included in the candidate list for authorization. This substance may cause cancer and is suspected of damaging the unborn child.

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use adequate ventilation to keep airborne concentrations low.

### 8.2.2. Personal protective equipment

Protective gloves, splash-proof goggles, splash apron or lab coat. Safety eyewear designed to protect against splash of liquids.

### 8.2.3. Environmental exposure controls

Do not allow to enter drains or watercourses.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Physical State:	Liquid
Appearance:	Dark Red Liquid
Color:	Dark red
Odour:	N/A
Odour threshold:	N/A
pH:	7.0-9.0
Relative evaporation rate:	N/A
Melting point/Freezing point:	N/A
Boiling point:	N/A
Flash point:	N/A
Flammability:	N/A
Vapour pressure:	N/A
Relative vapour density at 20°C:	N/A
Relative density:	N/A
Log Pow:	N/A
Explosive properties:	N/A
Oxidising properties:	N/A

<sup>1</sup> NOTE: A skin notation assigned to the OEL value indicates the possibility of significant uptake through the skin.

Solids:	33.5%
Viscosity:	20-40 sec.
Decomposition Temp.:	N/A
Explosive Limits:	N/A
Auto-ignition Temp.:	N/A
Solubility:	N/A

## 9.2. Other information

VOC's (ASTM D 2369-87): 7.0 %.

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable under recommended storage conditions (see section 7).

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous Decomposition Products: N/A.

Hazardous Polymerization: N/A.

### 10.4. Conditions to avoid

Sources of ignition. Excessive heat.

### 10.5. Incompatible materials

Combustible materials.

### 10.6. Hazardous decomposition products

N/A



**Section 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****11.1.1. Signs and symptoms of exposure**

Based on test data and/or information on the components, this material may produce the following health effects: Harmful if swallowed. Irritating to eyes. Vapors may cause drowsiness and dizziness.

Acute toxicity: Not available.

Skin corrosion/irritation: Not available.

Serious eye damage/irritation: Not available.

Respiratory or skin sensitization: Not available.

Germ cell mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Specific target organ toxicity (single exposure): Not available.

Specific target organ toxicity (repeated exposure): Not available.

Aspiration hazard: Not available.

**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties: No data available

**11.2.2 Other Information**

No data available.

**Section 12: ECOLOGICAL INFORMATION****12.1. Toxicity**

No information available.

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Endocrine disrupting properties**

The inks IK50F, IK50S, IK51F and IK51S do not contains endocrine disruptor substances.

**12.7. Other adverse effects**

No information available.

**Section 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

Dispose in accordance with all federal, state provincial and local regulations.

Do not allow it to enter soils or aquifers.

**Section 14: TRANSPORT INFORMATION****14.1. UN number**

Not considered a dangerous good according to IATA, IMDG, ADN, ADR, RID Dangerous Goods Regulations.

**14.2. UN proper shipping name**

N/A

**14.3. Transport hazard class (es)**

N/A

**14.4. Packing group**

N/A

**14.5. Environmental hazards**

N/A

**14.6. Special precaution for users**

No additional information available.

**14.7. Transport in bulk according to Annex II MARPOL 73/78 and the IBC CODE**

N/A

**Section 15: REGULATORY INFORMATION****15.1. Safety, Health and environmental regulation/legislation specific for the substance or mixture**

Contains substance on the REACH Candidate List: disodium 3,3'-(biphenyl-4,4'-diyldiazene-2,1-diyl) bis(4-aminonaphthalene-1-sulfonate), n° CAS 573-58-0.

Contains no REACH Annex XIV substances.

Complies with REACH Annex XVII restriction n° 43 applied to substance: disodium 3,3'-(biphenyl-4,4'-diyldiazene-2,1-diyl) bis(4-aminonaphthalene-1-sulfonate), n° CAS 573-58-0 and restriction n° 55 applied to substance: 2-(2-butoxyethoxy)-ethanol, n° CAS 112-34-5.

**15.2. Chemical safety assessment**

No chemical safety assessment is required.

**Section 16: OTHER INFORMATION**

According to Regulation (EU) 2020/878

Indication of changes: N/A

Abbreviations and acronyms:

CLP: Classification, Labeling and Packaging

CAS number: Chemical Abstracts Service number

Data sources:

<https://echa.europa.eu/information-on-chemicals/cl-inventory-database>

<https://echa.europa.eu/es/information-on-chemicals>

Regulation on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

#### **16.1. Legal disclaimer**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The company shall not be held liable for any damage resulting from handling or from contact with the above product.

#### **16.2. Date of issue/Date of revision**

15-06-2023

#### **16.3. Revision number**

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