

## 1-Identification of the substance/preparation and of the company/undertaking

- **Product details**

**Product name:** Optimize enhancer

**Product type/code:** NI-052

- **Application of the substance/the preparation :** Optimize in Ink-Jet Printing

- **Manufacturer/Supplier:**

Ninestar Corporation

No. 3883,Zhuhai Avenue,Xiangzhou District, Zhuhai Guangdong,P.R. China

Postal code: 519060

Oversea sales department: Tel: +86 756 8539188 Fax: +86 756 8539856

- **Emergency Phone:** +86 800- 830- 7918 (24 hours hotline)

## 2-Hazards Identification

- **Hazard description:**

This product is not classified as hazard substance according to the EC Regulation 1272/2008(CLP).

- **Regulation 1272/2008(CLP) and following amendments and adjustments.**

Hazard classification and indication: --

- **Label elements:**

Hazard labelling pursuant to EC Regulation 1272/2008(CLP) and subsequent amendments and supplements.

Hazard pictograms:--

Signal words: --

Hazard statements: --

Precautionary statements:

P101 If medical advice is needed have product container or label at hand.

P102 Keep out of reach of children.

- **Other hazards.**

Information not available.

## 3-Composition/Information on Ingredients

• **Description:**

**Mixture: containing of the following components. The classification is mainly based on pure substance. The concentration of the substance in the mixture is very lower than the pure substance. The main substance in the mixture is water.**

CAS No / EC No	Components / Formula / classification	Range of concentration
CAS: 111-46-6	Diethylene glycol C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>	0.1%-9%
EC: 203-872-2	Acute Tox. 4 H302	
CAS: 56-81-5	Glycerol C <sub>3</sub> H <sub>5</sub> (OH) <sub>3</sub>	1%-20%
EC: 200-289-5	/	
CAS: 67-63-0	Isopropanol C <sub>3</sub> H <sub>8</sub> O	0.1%-3%
EC:200-661-7	Flam.Liq.2 H225, Eye Irrit.2 H319, STOT SE 3 H336	
CAS: 7732-18-5	Water H <sub>2</sub> O	60-85%
	/	

## 4-First Aid Measures

**In case of contact, ingestion or inhalation, the following general measures provided for a first aid shall be taken.**

• **After eyes contact:**

Do not rub eyes. Immediately flush eyes with large amounts of clean, warm water (low pressure) for at least 15 minutes. If the irritation persists, seek medical advice.

• **After skin contact:**

Immediately wash affected areas with mild soap and water. If the irritation persists, seek medical advice.

• **After ingestion:**

Ingestion is not an expected route of exposure during normal use of the product. If ingested, seek medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

**• After inhalation:**

Remove to fresh air. If respiration is difficult, administer artificial respiration and seek medical advice.

**• Indication of any immediate medical attention and special treatment needed:**

Follow doctor's orders.

## 5-Fire-fighting Measures

**• Suitable extinguishing agents:**

Dry chemical, carbon dioxide, water spray or regular foam

**• Extinguishing media which shall not be used for safety reasons:** Not known.**• Special hazards arising from the substance or mixture:**

Product is a nonflammable water-based solution.

Hazardous combustion products (gases/vapors) produced in fire can include carbon monoxide, carbon dioxide, nitrogen oxides, and smoke.

**• Flash point and method:** >93.3°C (200°F) Closed Cup**• Approximate Flammable Limits in Air ,%by Volume:** Not available**• Autoignition Temperature:** Not available**• Fire Fighting Instructions:**

This product is not flammable. Use normal firefighting procedures for the area.

## 6-Accidental Release Measures

**• Personal precautions:**

Wear appropriate personal protective measures, avoid contact eyes and skin.

**• Environmental precautions:**

The product must not penetrate the sewer system, surface water, ground water and neighbouring areas.

Avoid birds or fish ingestion from drainage system, please thoroughly recycle.

**• Measures for cleaning/collecting:**

Transfer the leaked products to container. Absorb with inert absorbent such as dry, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

Flush a small amount of residue with large amounts of water and detergent.

- **Additional information:**

Any information on personal protection and disposal is given in sections 8 and 13.

## 7 - Handling and Storage

- **Handling:**

- **Information for safe handling:**

Wear appropriate personal protective measures, avoid contact eyes and skin.

Ventilation is well and far away from heat.

- **Information about fire-and explosion protection:**

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away. Do not smoke.

Protect against electrostatic charges.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Keep away from excessively alternate heat and cold, direct sunniness.

Keep away from strong acid, strong base and strong oxidizing agent.

Keep away from incompatible substance or mixtures.

Store in a cool, dry, ventilated area.

- **Further information about storage conditions:**

Keep container tightly sealed.

Keep out of the reach of children.

## 8-Exposure Controls, Personal Protection

- **Information about design of technical facilities:**

To provide proper ventilation, use adequate general or local exhaust ventilation.

- **Ingredients with limit values that require monitoring at the workplace:** No data available

- **Personal protective equipment:**

- **Respiratory protection:**

Respirators are not needed for normal use.

- **Eye/Face protection:**

Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of the material.

- **Body protection:**

If there is potential for significant dermal contact, wear appropriate impervious clothing and gloves.

## 9-Physical and Chemical Properties

- **General Information:**

**Form** Liquid

**Color** Transparent

**Odor** Slight

- **Change in condition:**

**Melting point** No data available

**Freezing point** No data available

- **Flash point** >93.3°C (>200°F) Pensky-Martens Closed Cup

- **Flammability Limits in Air,**

**upper, %by Volume** No data available

**lower, %by Volume** No data available

- **Vapor pressure** No data available

- **Vapor density** No data available

- **Specific Gravity** > 1

- **Solubility in Water** Miscible

- **pH** 7-9

- **Viscosity** >1cp

## 10-Stability and Reactivity

- **Reactivity:**

There are no particular risks of reaction with other substances in normal conditions of use.

• **Chemical stability:**

The product is stable in normal conditions of use and storage.

• **Possibility of hazardous reactions:**

No hazardous reactions are foreseeable in normal conditions of use and storage.

• **Polymerization:**

Polymerization will not occur.

• **Hazardous decomposition products:**

No decomposition reaction occurs in normal conditions of use and storage.

## 11-Toxicological Information

• **Acute toxicity:**

Diethylene glycol

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

LD50 (rat, oral) : >12565mg/kg(RTECS)

LC50 (rat, inhalation/4 hr.) : No data available

Glycerol

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

LD50 (rat, oral) : >31.5 g/kg(RTECS)

LC50 (rat, inhalation/4 hr.) : No data available

Isopropanol

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

LD50 (rat, oral) : >5.84g/kg(RTECS)

LC50 (rat, inhalation/4 hr.) : No data available

WATER

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

LD50 (rat, oral) : No data available

LC50 (rat, inhalation/4 hr.) : No data available

• **Primary irritant effect:**

On the skin: No irritation

On the eyes: No data available

• **Local effect:** No

• **Sensitive:** No

• **Chronic or long-time toxicity:** No

## 12-Ecological Information

• **Environmental Data:**

No information available for product.

• **Mobility in soil and water**

No information available for product.

• **Persistence/Biodegradability**

No information available for product.

• **Exotoxicity Data**

No information available for product.

## 13-Disposal Considerations

• **Product:**

**Waste Disposal**

Do not discharge into environment, directly. Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

• **package**

**Waste Disposal**

Contaminated or damaged package must be recovered or disposed of in compliance with national waste management regulations.

## 14-Transport Information

- **International transport regulations:** Not strict rules.

**DOT (Domestic Surface)** Not regulated.

**ICAO/IATA (Air)** Not regulated.

**IMO/IMDG (Ocean)** Not regulated.

## 15-Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture.**

**CLP category** Limited

**Restrictions relating to the product or contained substances pursuant to Table 3.1 to EC**

**Regulation 1272/2008(CLP)** Limited

**Substances in Candidate List(SVHC in REACH)** None

## 16-Additional Information

- **Other information:**

This SDS was prepared in accordance with CLP Regulation (EC) No.1272/2008, EU No 2015/830, EC No 1907/2006, REACH, GB/T16483-2008 and GB13690-2009.

- **Disclaimer:**

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

- **Abbreviations and acronyms:**

**ACGIH:** American Conference of Governmental Industrial Hygienists

**CAS:** Chemical Abstracts Service

**CLP:** Classification, Labeling and Packaging of substances and mixtures

**SVHC:** Substances of Very High Concern

**REACH:** Registration, Evaluation, Authorization and Restriction of Chemicals

**DOT:** Department of transportation

**EC:** Effective concentration



**EC50:** Effective concentration, 50 percent

**EINECS:** European Inventory of Existing Chemical Substance

**IAIA:** International Association for Impact Assessment

**ICAO:** International Civil Aviation Organization

**IMO:** International Maritime Organization

**IMDG:** International Maritime Dangerous Goods

**LC50:** Lethal concentration, 50 percent

**LD50:** Lethal dose, 50 percent

**NOEC:** No Observed Effect Concentration

**OSHA:** Occupational Safety and Health Administration (U.S.A.)

**STEL:** Short Term Exposure Limit

**TWA:** Time Weighted Average

**TLVTN:** Threshold Limit Value

**VOC:** Volatile Organic Compounds