

# Safety Data Sheet

According to Regulation (EG) No. 1907/2006 {REACH}

## TEST INKS / PENS PINK 38, 40 & 42mN/m

Product No.: 261.0016

Revision date: 03.03.2017

Page 1 of 8

Print date: 03.03.2017 / Version 2.0 gb

---

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

1.1 Product identifier:

Substances:

**Test Ink**  
**Test Pens**

1.2. Relevant identified uses of the substance or mixture and uses advised against relevant identified uses

Relevant uses:

Determining the surface tension and the degree of cleanliness of the surfaces of solid bodies, such as plastic films and moulded parts from these materials

1.3 Details of the supplier of the safety data sheet:

Name	Corona Supplies Ltd
<b>Address</b>	Unit G, Howland Road Business Park, Thame, Oxon. OX9 3GQ. UK.
Phone	+44 1844 261779
FAX	+44 1844 358187
E-Mail	<a href="mailto:sales@coronasupplies.co.uk">sales@coronasupplies.co.uk</a>
Homepage	<a href="http://www.coronasupplies.co.uk">www.coronasupplies.co.uk</a>

1.4 **EMERGENCY TELEPHONE NUMBER:** +49 761 19240  
Vergiftungs- Informations-Zentra le Freiburg  
(24h in Germany)

---

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

**Regulation (EG) No. 1272/2008**

Eye irritation, category 2

H 319, Eye irrit 2

Irritant effect on the skin, category 2

H 315, Skin irrit 2

Acute toxicity, category 4, oral

H 302, Acute Tox. 4 (oral)

**Additional information:**

Full text of H- and EUH-phrases: see SECTION 16

2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHSJ**

**Product identifier:**

TEST INKS  
TEST PEN

Hazard pictograms :



GHS07

**Signal word:**

Warning

**Hazard statements:**

H319	Causes serious eye irritation
H315	Causes skin irritation
H302	Harmful if swallowed

**Precautionary statements:**

P302 + P352: IN CASE OF CONTACT WITH THE SKIN: Wash with plenty of soap and water.

P301 + P312: IF SWALLOWED: Call a doctor if feeling unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other hazards:**

None known

**SECTION 3: Composition/information on ingredients****3.1 Mixtures****Hazards ingredients**

Substance name				
CAS-No.	EG-No.	REACH-No.	In dex-No	%
Classification of regulation (EG) No. 1272 [CLP]				MG g/mol

2-Methyl-2,4-pentanediol - C <sub>8</sub> H <sub>18</sub> O <sub>2</sub>				
107-41-5	203-489-0	)*	6 03-053-00-3	3-90%
Eye Irrit. 2, Skin Irrit. 2; H319, H315				118,17 g/mol

Diethyleneglycol - <i>Synonym:2,2'-Oxydiethanol</i> - C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>				
111-46-6	203-872-2	)*	6 03-140-00-6	10-100%
Acute Tox 4 (Oral) 2 STOT RE: H302				106,12 g/mol

Preparation of organic solvents and colouring components (0,2%)

)\* A registration number is not available for this substance as the Registration Number substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline

Additional information:

Full text of H- and EUH-phrases: see SECTION 16

**SECTION 4: First aid measures****4.1 Description of first aid measures****Following inhalation:**

Supply fresh air

**Following skin contact:**

Rinse with plenty of water. Remove contaminated clothing.

**Following eye contact:**

Rinse with plenty of water. Consult an eye specialist immediately.

**Following ingestion:**

Drink plenty of water immediately (maximum 2 glasses). Administer : Activated carbon (20-40 g in a 10% suspension). Consult a doctor.

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

Irritant effects, coughing, dyspnoea, dizziness, unconsciousness, headache, convulsions, gastro-intestinal complaints, nausea, vomiting.

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

No information available.

---

**SECTION 5: Firefighting measures****5.1 Extinguishing media:**

Water, carbon dioxide (CO<sub>2</sub>), foam, extinguishing powder

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

Flammable substances, vapours are heavier than air and spread over the floor.

Intense heating may cause explosive mixtures with air to form.

Hazardous combustion gases or vapours may form in case of fire.

Hazardous combustion gases or vapours may form in case of fire: carbon monoxide and carbon dioxide.

**5.3 Advice for fire fighters**

Do not stay in the danger area without self-contained breathing apparatus. Avoid skin contact by keeping a safe distance or wearing suitable protective clothing.

**Additional information:**

Use a water spray jet to cool closed containers near to the source of the fire. Damp down escaping vapours with water.

Prevent extinguishing water from entering the surface water or ground water system.

---

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****For non emergency personnel**

Do not inhale vapours/aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger zone, observe emergency procedures, consult an expert.

**Protective equipment:**

See SECTION 8

**6.2 Environmental precautions:**

Do not empty into drains. Risk of explosion.

**6.3 Methods and material for containment and cleaning up:**

Seal drains. Contain, control and pump off the spillage.

Please note possible material restrictions! (Information in section 7 or section 10)

Absorb with liquid-binding material, e.g. Chemizorb®. Send for disposal. Clean up area.

**6.4 Reference to other sections**

Refer to SECTION 13 for disposal information

**SECTION 7: Handling and storage****7.1 Precaution for safe handling****Advice on safe handling:**

Avoid formation of aerosols. Keep container tightly closed

**7.2 Conditions for safe storage, including any incompatibilities**

Store tightly closed.

Store at +15°C to + 25°C.

**7.3 Specific end uses:**

There are no other specific end uses other than those referred to in section 1.

---

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

None known.

**8.2 Exposures controls**

Technical protection measures and the use of suitable working methods always have priority over the use of personal protective equipment. See SECTION 7.

**8.2.1 Appropriate engineering equipment:**

The method for measuring the workplace atmosphere must comply with the requirements of DIN EN 482 and DIN 689

**8.2.2 Personal protective equipment:**

Body protection needs to be selected specifically for the workplace based on the concentration and volume of hazardous substances. The chemical resistance of the protective equipment should be ascertained with the respective supplier.

As work is generally carried out with very small quantities, there is less need for personal protective equipment with the exception of appropriate hand protection if used carefully and properly with a brush or pen application **as** long as skin contact can be excluded. It is advisable to use special skin barrier cream to protect the skin.

Hygiene measures:

Change contaminated clothing immediately. Preventative skin protection. Wash hands. and face after finishing work.

**Eye protection:**

Safety goggles

**Hand protection:**

In full contact: Hand protection material: Nitrile rubber, layer thickness 0.50 mm, > 480 min breakthrough time

With splash contact: Hand protection material: Nitrile rubber, layer thickness 0.50 mm, >480 min breakthrough time

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the resultant standard EN 374, for example KCL 706 Lapren® (full contact ), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests according to EN374 with samples of the recommended glove types.

This recommendation applies only for the product mentioned in this safety data sheet that is supplied for the purpose specified by us. If it is dissolved in or mixed with other substances and under conditions deviating from EN374, you will need to contact suppliers of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell).

**Respiratory protection:**

Required when vapours/aerosols are generated.

Recommended filter type: filter A

The operator must ensure that the maintenance, cleaning and testing of breathing apparatus is carried out and documented in accordance with the manufacturer's user information.

**8.2.3 Environmental exposures controls:**

Do not empty into drains.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Form:	liquid
Colour:	pink
Odour:	almost odourless
Odour threshold:	no information available
pH value:	(20°C) 6-8 at 200 g/l
Melting point:	by grading, between -40 and 6°C (DIN 51583)
Boiling point/boiling range:	by grading, between 196 and 244°C at 1013 hPa
Flash point:	between 93 and 123°C c.c. (DIN 51758)
Evaporation rate:	no information available
Flammability (solid ,gaseous):	no information available Lower
explosion limit:	between 1 u. 1,8 % vol
Upper explosion limit:	between 9.9 and 12,2 % vol
Vapour pressure:	(20°C): between 0.03 and 0.07 hPa
Density:	(20°C) between 0.92 and 1.12 g/cm <sup>3</sup>
Solubility:	no information available
Water solubility:	no information available
Partition coefficient; n	log Pow: -1.98 to 0.58 {25°C}
Octanol/water	Method: (IUCLID)
	(lit.) Bioaccumulation is not expected (log Pow <1)

---

Autoignition temperature:	no information available
Decomposition temperature:	no information available
Viscosity, dynamic:	(20°C) 36 - 42 mPa. S
Explosive properties:	no information available
Oxidising properties:	no information available
Organic solvent:	100.0 %
VOE (EU)	100.00 %
Other information:	
Ignition temperature:	between 230 and 425 (DIN 51794)

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity:

Intense heating may cause explosive mixtures with air to form.

### 10.2 Chemical stability:

The product is chemically stable under normal ambient conditions (room temperature).

### 10.3 Possibility of hazardous reactions:

Possible violent reactions with: Mineral acids, strong oxidising agents

### 10.4 Conditions to avoid:

Intense heating. A range from approx 15 Kelvin below the flash point is to be considered critical.

### 10.5 In compatible materials:

No information available.

### 10.6 Hazardous decomposition products:

No information available.

---

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### 11.1.1 Substances

##### Acute toxicity Diethylenglycol

oral: LD50 rat: Dose 12565 mg/kg  
LDL0 human: Dose 1000 mg/kg  
dermal: LD50 rabbit: Dose 11890 mg/kg

##### Acute toxicity 2-Methyl-2,4-pentandiol

oral: LOSO rat: Dose 3692 mg/kg (IUCLID); absorption  
inhalativ: Symptoms: mucosal irritation, coughing, dyspnoea  
dermal: LOSO rabbit: Dose 8000 mg/kg (RTECS);  
Skin irritation Diethylenglycol (rabbit): No irritation  
Skin irritation 2-Methyl-2,4-pentandiol (rabbit): Irritations (IUCLID)  
Eye irritation Diethylenglycol (rabbit): No irritation  
Eye irritation 2-Methyl-2,4-pentandiol (rabbit): Causes serious eye irritation (IUCLID)  
Sensation test with Diethylenglycol (guinea pig.): negative  
In-vitro genotoxicity Diethylenglycol Ames test: negative (IUCLID)  
In-vitro genotoxicity 2-Methyl-2,4-pentandiol Ames test: negative (IUCLID)

##### CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

No information available.

##### Specific target organ toxicity (single exposure)

The mixture is not classified as target organ toxic with single exposure.

##### Specific target organ toxicity (repeated exposure)

The mixture is not classified as target organ toxic with repeated exposure.

##### Aspiration hazard

No classification with regard to aspiration toxicity

##### Other information:

Systemic effects: After absorption of large quantities: tiredness, CNS disorders, headache, dizziness, convulsions, unconsciousness, drop in blood pressure, tachycardia  
Take the normal precautions when handling chemicals.

---

**SECTION 12: Ecological information****12.1 Toxicity:**

Diethylenglycol: Test EC50 (mg/l)

Fish toxicity: 75200 mg/l/96 h (Pimephales promelas)

Daphn ia toxicity: EC50 Daphnia magna: &gt;10000 mg/l /24 h

Algal toxicity:NOEC Scenedesmus quadricauda: 2700 mg/l /8 d (lit)

2-Methyl-2,4-pentandiol:

Fish toxicity: LC50 Gambusia affinis: 8510 mg/l/ 96 h (ECOTOX Database)

Daphn ia toxicity: EC50 Daphnia magna: 3200 mg/l /48 h (IUCRID)

Bacteria toxicity: EC50 Photobacterium phosphoreum: 3070 mg/l 5 min (IUCI!b )-

**12.2 Persistence and degradability**

Diethylenglycol:

Test: 8S85

Biodegradability: 8 S8 5/CSO - biological degradability

2-Methyl-2,4- pentandiol:

Biodegradability: >70% - 28d / Methode: OECD 302B

Results: easily eliminated (DOC-reduction &gt;70%)

**12.3 Bioaccumulative potential**

Partition coefficient; n-Octanol / water

Diethylenglycol: log Pow &lt; 4

2-Methyl-2,4- pentandiol: Log Pow: 0,58 (calculated)

Bioaccumulation is not expected (log Pow&lt;1)

**12.4 Mobility in soil**

No information available.

**12.5 Results of PST and vPvB assessment**

A PBT/vPvB assessment is not available and a chemical safety assessment is not required/ has not been carried out.

**12.6 Other adverse effects****Additional ecotoxicological information**

Do not allow to enter watercourses, waste water or soil!

---

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Product residues must be disposed of in compliance with Waste Directive 2008/98/EC as well as the national and regional regulations.

Leave chemicals in original containers. Do not mix with other waste. Uncleaned containers must be handled according to the product.

Use the address to contact us if you have any questions.

---

**SECTION 14: Transport information****14.1 Special precautions for user**

Not classified as a hazardous material according to the ADR/RID, ADN, IATA, IMDG transport regulations

**14.2 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not relevant.

---

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations /legislation specific for the substance or mixture****15.1.1 EU regulations**

Hazardous Incident Ordinance: 96/82/EC

Directive 96/82/EC does not apply.

**Employment restriction:** Observe employment restrictions in accordance with the Youth Protection Act (94/33/EC).  
Observe employment restrictions in accordance with the Pregnant Workers Directive (EC 92/85 /EEC) for expectant or nursing mothers.

#### 15.1.2 National regulations (Germany)

Storage class VCI: 10 Flammable liquids unless storage class 3  
Water hazard class: WGK 1 Slightly harmful to water  
BG Chemie data sheet: M004 Irritating substances /corrosive substances  
M050 Handling hazardous materials  
Technical Instructions on Air Quality:  
Class NC Ratio 100%

#### Chemical Safety Assessment:

No chemical safety assessment has been carried out for this product.

### SECTION 16: Other information

#### 16.1 Indication of changes

The revised version of this data sheet contains changes in section:  
1; 2; 3; 4; 8; 9; 11; 12; 15; 16

#### 16.2 Abbreviations and acronyms

ADR: Accord European sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
CAS: Chemical Abstracts Service (division of the American Chemical Society) C  
P: Classification Labelling and Packaging (Regulation (EC) No. 1272/2008)  
EAK / AW : europaischer Abfallschlüsselkatalog (european waste catalogue)  
EINECS: European Inventory of Existing Commercial Chemical Substances  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
IMDG: international Maritime Code for Dangerous Goods  
RCP: reciprocal calculation procedure  
RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
TRGS: Technische Regel for den Umgang mit Gefahrstoffen  
VOC: volatile organic compound  
CAS: Chemical Abstracts Service  
IATA-DG R: International Air Transport Association-Dangerous Goods Regulations  
IMDG-Code: International Maritime Code for Dangerous Goods  
ISO: Norm der International standards Organization  
IUCLID: International Uniform Chemical Information Database  
LC : Lethal concentration  
LD: Lethal Dose  
UN: United Nations (Vereinte Nationen)  
VOE : Volatile Organic Compounds (flüchtige organische Verbindungen)

#### 16.3 Key literature references and sources for data

The data for the hazardous ingredients were taken respectively from the last version of the pre-suppliers safety data sheet.

#### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]:

See SECTION 2.1

#### 16.5 Relevant H- and EUH-phrases (number and full text):

H319 Causes serious eye irritation  
H315 Causes skin irritation  
H302 Harmful if swallowed

**16.6 Training advice:**

Provide appropriate information, instructions and training for users.

**16.7 Further information:**

The health hazards referred to in this data sheet may occur if larger quantities of the product are handled carelessly or inappropriately and when safety precautions and hygiene measures are not observed. However, as a quantity of several milligrams is used in a process to measure the surface tension and these measurements are not continuous but instead conducted over a period of one or more hours, we can practically exclude any damage to health if the product is handled correctly and the prescribed safety measures are observed (these include good ventilation and appropriate hand protection).

Information:

Phone	<b>+44 1844 261779</b>
Fax	<b>+44 1844 358187</b>
E-Mail	<a href="mailto:sales@coronasupplies.co.uk">sales@coronasupplies.co.uk</a>

---

The information contained herein is based on our present knowledge and characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product described.

---