Item description: Test inks and pens, green, 28 – 72 mN/m in accordance with REACh regulation 1907/2006/EG and 453/2010/EG

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Item description: Test ink and test pens 28 – 72 mN/m, chemical preparation

REACh registration number

A registration number for this mixture is not available as its contents or its usage in accordance with Article 2 of the REACh regulation (EC) No 1907/2006 are excluded from registration, the annual tonnage does not require registration or registration is planned at a later point in time.

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

1.2.1 Relevant applications

Solvent mixture for application on a solid surface for the purpose of measuring surface energy. No further applications intended.

1.2.2 Inadvisable applications

None known

1.3 Details of the supplier of the safety data sheet

SEST Messtechnik - Johannes Seemann, Gässle 13, 79588 Efringen-Kirchen, Germany

Email: info@sest-messtechnik.de

Telephone: +49 (0)7628 / 7164900 (working days from 08:30 to 17:00)

1.4 Emergency telephone number

CHEMTREC: +44 (0)870 8200418

Freiburg Poison Information Centre: +49 (0)761/19 24 0

Poison Information Mainz, (24 h in German and English) +49 (0)6131/19 24 0

2. Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements

Labelling (REGULATION (EC) No. 1272/2008)

Pictogram - none

Signal word none

Hazard symbol(s) none

Precautionary measure(s) none

Other

The red, blue and green coloured ink does not contain any substances classified as hazardous or dangerous to health above the consideration limit under EU law. The colourless ink does not contain any substances classified as hazardous or dangerous to health according to EU law.

2.3 Other hazards

This mixture does not fulfil the criteria for classification as PBT or vPvB.

Further hazardous properties cannot be ruled out. This product must be handled with the care usual when dealing with chemicals.

3. Composition/information on ingredients

3.1 Substances

This product is a mixture.

3.2 Mixtures

	Product identifier	Percentage	Classification in accordance with Regulation (CE) N° 1272/2008 (CLP)
Mixture of solvent(s) and dissolved solid(s) die containing the following functional groups: Alcohol, glycol ether, carboxyl, amide and water in different proportions depending on the classification.	-	100,00%	No classification

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approx. 0.1% dye

Substance with a community workplace exposure limit:

(2-methoxymethylethoxy) propanol - CAS no.: 34590-94-8

4. First aid measures

4.1 Description of first aid measures

General notices: Remove soiled clothing immediately. In case of health problems, consult a doctor.

After inhaling: As an aerosol: Rinse mouth, supply fresh air and, as a precaution, consult a doctor.

After contact with the skin: Remove all contaminated items of clothing immediately. Wash skin with water.

After contact with the eyes: Rinse gently with water for several minutes. Remove any contact lenses, if wearing them, Continue to rinse.

After swallowing: Rinse mouth thoroughly and drink water immediately (2 glasses at the most), consult doctor

4.2 Most important symptoms and effects, both acute and delayed

Narcosis, irritant effects, dizziness, diarrhoea, headache, see also section 11

4.3 Indication of any immediate medical attention and special treatment needed In case of loss of consciousness: Call emergency doctor

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO2, foam, powder

Unsuitable extinguishing agents for safety reasons: Water with full jet

5.2 Special hazards arising from the substance or mixture

Possible combustion products: Carbon monoxide, carbon dioxide, nitrogen oxide, acrolein Flammable. Vapours are heavier than air and can spread along the floor. In the event of extreme heating, explosive mixtures with air are possible. In the event of a fire, hazardous combustion gases or vapours may form. In the event of a fire, the following substances may be released: Nitrogen oxide, acrolein

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in accordance with REACh regulation 1907/2006/EG and 453/2010/EG

5.3 Notice

Special protective equipment for firefighting:

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Only enter the hazard area with self-contained breathing apparatus. Avoid contact with the skin by maintaining a safe distance or wearing suitable protective clothing.

Further information

Cool the container by spraying water from a safe distance. Subdue escaping vapours with water. Do not discharge extinguishing water into the surface water or groundwater system.

6. Accidental release measure

6.1 Personal precautions, protective equipment and emergency procedures:

Information for personnel not trained for emergencies: Avoid contact with the substance. Do not inhale vapour/aerosol. Ensure adequate ventilation. Clear danger zones, proceed according to emergency procedure and alert trained professionals.

Information for emergency services: Protective equipment: see section 8.

6.2 Environmental precautions:

Do not release into sewer system.

6.3 Methods and material for containment and cleaning up

Wipe up small quantities of leaked fluid (up to approx. 50 ml) with a cloth or (paper) towel; absorb larger quantities with a liquid-binding and neutralising material e.g. Chemizorb® or Vermiculite®. Dispose of material. Clean area.

6.4 Reference to other sections

Observe the safety measures outlined in sections 7, 8 and 13. For disposal information, see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Observe the information on the label. Do not leave containers open. Avoid contact with the skin and eyes.

Advice on fire and explosion protection:

Keep away from heat, sparks and flames. Avoid contact with oxidising agents.

Information on safe handling

Hygiene measures

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

7.2 Conditions for safe storage, including any incompatibilities

Protect against heat and direct sunlight. Store tightly sealed in a dry place between $+15^{\circ}$ C and $+25^{\circ}$ C.

Store in a place with a solvent-resistant floor or in a drip tray to protect the groundwater in the event of a leak.

7.3 Specific end use(s)

Other than the applications specified in section 1.2, there are no further specific end applications.

8. Exposure controls/personal protection

8.1 Control parameters

(2-METHOXYMETHYLETHOXY) PROPANOL

Components with limit values that require monitoring in the workplace

Ingredients

Basis	Value	Control Parameters	Basis	
(2-methoxymethylethoxy) propanol (34590-94-8)		Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values		
EU ELV	Effects on the skin		Skin resorptive	
	Daily average	50 ppm 308 mg/m3		
	Comments	Identifies the possibility of significant absorption through the skin Indicative		
	OEL:	50 ppm 310 mg/m3	Peak limit value 1 Type of exposure: Vapour and aerosol.	

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8.2 Exposure controls

Technical safety measures

Technical measures and appropriate work procedures should be given priority over the use of personal protective equipment. See section 7.

Individual safety measures

Body protection must be chosen depending on the concentration and quantity of the hazardous substance and the respective workplace. The chemical resistance of the protective equipment must be clarified with the supplier.

Hygiene measures

Change contaminated clothing immediately. Preventative skin protection (skin protection cream) is recommended. Wash face and hands after finishing work.

Eve/face protection

Wear safety glasses with side protection.

Hand protection

Full contact:

Glove material: Polychloroprene – Glove thickness: 0.65 mm – Penetration time: > 480 min Splash contact:

Glove material: Natural latex – Glove thickness: 0.6 mm – Penetration time: > 120 min The protective gloves used must meet the specifications of the EC Directive 89/686/EWG and the associated EN374 standard.

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Respiratory protection – required during exposure to vapours/aerosols. Recommended filter: A(-P2)

Other protective measures – Protective clothing when handling larger quantities

Limitation and monitoring of environmental exposure –

Do not release into sewer system.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:

red, green, blue or colourless Colour:

Odor: unspecific.

pH value at 100 g/l H₂O: 6-9 (20°C) approx. 12°C Melting temperature:

Boiling temperature: > 100°C Ignition temperature: > 200°C Flash point: > 80°C Explosion limits: Not available Vapour pressure: (20°C) approx. 20 hPa Relative vapour density: Not available Density: approx. 1 g/cm³ Solubility in water: very soluble

(20°C)

9.2 Other information

None

10. Stability and reactivity

10.1 Reactivity

See section 10.3.

10.2 Chemical stability

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

Hygroscopic.

10.3 Possibility of hazardous reactions

No hazardous reactions are to be expected with proper usage. The formation of explosive mixtures on contact with air is possible in the event of extreme heating. Strong reaction possible with: Oxidising agents, reducing agents, acid halides, acid anhydrides

10.4 Conditions to avoid

Extreme heating

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

In the event of fire: see section 5

11. Toxicological information

11.1 Information on toxicological effects

EXPECTED PROPERTIES BASED ON COMPONENTS OF THE PREPARATION:

Acute toxicity

LD 50 (oral, rat): > 5000 mg/kg. (Contains no substances of unknown toxicity)

LD 50 (dermal, rabbit): > 3000 mg/kg. (Contains a substance of unknown toxicity)

Irritation

Test for skin irritation (rabbit): Mild irritation.

Test for eye irritation (rabbit): Eye irritation – all ingredients

Sensitisation

negative; patch test (human and guinea pig, all ingredients)

Genotoxicity

Bacterial mutagenicity: negative; Ames test/OECD 471 (all ingredients)

Further toxicological information

After inhaling: Mild irritation of the respiratory tracts, lungs.

Mild irritation of: Skin, mucous membranes.

After absorption of larger quantities: Narcosis, vomiting, stomach ache, headache, dizziness,

diarrhoea, cvanosis

Danger of absorption via the skin

Carcinogenicity - No information available.

Reproduction toxicity - No information available.

Teratogenicity – Sufficient information not available for all ingredients.

Specific target organ toxicity – singular exposure – No information available.

Specific target organ toxicity – repeated exposure – No information available.

Aspiration hazard – No information available.

11.2 Further information

As not all toxicological properties are available for all the ingredients of this mixture, further hazardous properties cannot be excluded. This mixture must be handled with the care usual when dealing with chemicals. Only for commercial users.

12. Ecological information

EXPECTED PROPERTIES BASED ON COMPONENTS OF THE PREPARATION

12.1 Toxicity

Fish toxicity: LC₅₀ > 5000 mg/l (on Carassius auratus, Danio rerio and Pimephales promelas)

Daphnia toxicity: EC₅₀ > 800 mg/l (Daphnia Magna)

12.2 Persistence and degradability

Between 63% and 98% (OECD 301C, 301F, 302B,

Readily biodegradable.

Adsorbable organic halides (AOX): The mixture does not contain any organic halides.

12.3 Bioaccumulative potential

Log P(o/w): < 0.001 (estimated from the individual components, all components have an experimentally determined log P(o/w): < 0.001). No significant bioaccumulative potential is to be expected ($\log P(o/w) < 1$) (literature).

Item description: Test inks and pens, green, 28 – 72 mN/m in accordance with REACh regulation 1907/2006/EG and 453/2010/EG

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

Other ecological information

Do not allow to enter waters, sewage or soil. No ecological problems are to be expected if the product is handled and used properly.

13. Disposal considerations

Waste treatment methods

Waste product must be disposed of in accordance with Waste Framework Directive 2008/98/EC, as well as national and regional regulations. Leave chemicals in their original containers. Uncleaned containers must be treated according to the product.

Please request information about return systems for chemicals and packaging from your local waste disposal company.

14. Transport information

14.1-14.6 Not classified as dangerous the meaning of the transport regulations (ADR/RID, IATA, IMGD)

15. Regulatory information

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

EU regulations

Hazardous Incident Ordinance 96/82/EC

Ordinance 96/82/EC does not apply

Substances of very high concern (SVHC)

This product does not contain any substances of very high concern above the respective legal limit (> 0.1 % (w/w) REACh Regulation (EC) no. 1907/2006, Article 57).

National regulations

Water hazard class: 1 (mildly hazardous to water) (self-classification)

Storage class VCI: 10

BG Chemie information sheet: M050 Activities with hazardous substances

15.2 Chemical safety assessment

No chemical safety assessment has been performed for this product.

16. Other information

Training information

Provide adequate information, instructions and training for users.

Other

Only for commercial users

Dated: 28/10/2021

This information is based on the current state of our knowledge and serves to describe the product in terms of all the relevant safety precautions. It does not guarantee the properties of

the described product.

This information has been compiled to the best of our knowledge, but it does not claim to be exhaustive and should be understood by the user as a guide only. DyneHill does not accept any liability for damage that may occur when handling or coming into contact with these chemicals.

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