

SAFETY DATA SHEET

in accordance with Regulation (EC) No. 1907/2006 (REACH) and
OSHA HazCom Appendix D to §1910.1200 and 49CFR §172

Product no.: PX-199-000

Page 1 of 10

Rev date: 01/01/2019, Version 1.3 en US

1. Identification of the substance or mixture and of the company

1.1 Product identifier

Trade name / designation: Kolorguide dyne test Pens

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

Uses of the substance or mixture:

Determination of the surface tension and surface cleanliness of solids (films / molded parts) made of plastic, metal, glass etc.!

Details of the manufacturer and supplier of original SDS

1.3 Company Name Esmarco Corp, USA
Contact Mr, J, Rincon
Tel: +1 954 551 3502
Email: info@kolorguide.com

1.4 Details of the agent/distributor

Agent Name Esmarco Corep

Contact:
Tel:
Fax: +1 954 5513502
Email: info@kolorguide.com

1.5 Emergency:

Infotrac, US, PR, CA: 1.800.535.5053
Infotrac, Global: +1 352.323.3500

2. Possible Dangers

2.1 Classification of the mixture

Regulation (EC) No. 1272/2008

Hazard categories:	Flammable liquids: Flam. Fl. 2	H225
Serious eye damage		H318
Hazardous to waterways:	Aqu. chron. 2	H411

Additional information:

Full text of H and EUH phrases: see under section 16.

2.2 Labelling elements

Labelling in accordance with Regulation (EG No. 1272/2008 [CLP])

Product Identifier: QUICKTEST 38®

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225	Highly flammable liquid and vapor.
H318	Causes severe eye irritation.
H411	Toxic to aquatic organisms with long-lasting effects.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames as well as other ignition sources. No smoking.
P233	Keep containers tightly closed.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P305+P351+P338	IF IN EYES:

.	Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Call a POISON CENTRE or doctor/physician immediately.
P370+P378	In case of fire: use water spray, alcohol-resistant foam, carbon dioxide (CO ₂); extinguishing powder to extinguish it.
P403+P235	Store in a well-ventilated place. Keep cool.
P273	Avoid release to the environment.

Labelling of packaging with contents of no more than 125 ml
Hazard symbol:



Signal word: Danger

2.3 Other hazards:

Results of PBT and vPvB assessment: SECTION 12: Ecological Information

NOTE: The information contained in this Safety Data Sheet refers to the Quicktest ink. Because the pens contain an absorbed and comparatively small quantity of ink, most of this information will not be relevant to the user. See Section 7.1 for Safe Handling.

3. Composition / Information on Ingredients

3.1 Mixtures

Hazardous ingredients

Designation				
CAS No.	EC No.	REACH No.	Index No.	%
Classification in accordance with Regulation (EG) No. 1272 [CLP]				MG in g/mol

Ethanol				
CAS No.	EC No.	REACH No.	Index No.	%
64-17-5	200-578-6	01-2119457610-43		85 - <90 %
Flam. liq. 2, eye irrit. 2; H225 H319				

9-[2-(989-38-8Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride				
CAS No.	EC No.	REACH No.	Index No.	%
989-38-8	213-584-9	213-584-9		1 - <5 %
Acute toxicity 3, eye dam. 1, aquatic acute1, aquatic chronic 1; H301 H318 H400 H410				

Additional information:

Full text of H and EUH phrases: see under section 16.

4. First Aid Measures

4.1 Description of first aid measures

In case of accident or if feeling unwell, seek medical advice immediately (show doctor directions for use or safety data sheet if possible). If the person is likely to become unconscious, place and transport in stable sideways position. Do not administer anything if the person is unconscious or having convulsions. Take off all contaminated clothing immediately.

After inhalation:

Bring the person concerned into fresh air. Move the person concerned into a relaxed position and keep warm. Call a doctor if feeling unwell.

After skin contact:

IF ON SKIN (or hair): Remove/take off all contaminated clothing immediately. Rinse skin with water/shower. If skin irritation occurs: get medical advice/attention.

After eye contact:

In case of contact with eyes, rinse immediately for 10 to 15 minutes with running water with the eyelids open and consult an ophthalmologist

After ingestion:

Rinse mouth immediately and drink large quantities of water. Do NOT induce vomiting. Call a doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

4.3 Indication of any immediate medical attention or special treatment needed

Treat symptomatically.

5. Fire-fighting Measures**5.1 Extinguishing agents:**

Water spray, carbon dioxide (CO₂), alcohol-resistant foam, extinguishing powder

Unsuitable: full water jet

5.2 Specific hazards arising from the substance or mixture

Flammable. Vapors may form an explosive mixture with air. Vapors are heavier than air and spread over the floor.

In case of fire: Hazardous decomposition products: Carbon dioxide (CO₂). Carbon monoxide. Gases, vapors, harmful

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and a chemical protective suit. Adapt extinguishing measures to suit the environment.

Additional information:

Use water spray to protect people and to cool containers in the danger zone. Damp down gases/vapors/mist with a water spray jet. Collect contaminated extinguishing water separately. Do not empty into drains or waterways.

6. Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Eliminate all ignition sources.

Bring people to safety.

Ensure adequate ventilation.

Do not breathe gas/fumes/vapor/spray.

Avoid contact with skin, eyes and clothing.

Wear personal protective equipment.

6.2 Environmental precautions:

Do not empty into drains or waterways.

Do not allow to enter the ground/soil.

Inform the respective authorities in case of gas leaks or seepage into waterways, soil or drains.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, and universal binders). Treat the recovered material as prescribed in the "Disposal" section.

6.4 Reference to other sections

Safe handling: see section 7

Personal protective equipment: see section 8

Disposal: see section 13

7. Handling and Storage**7.1 Precautions for safe handling****Advice on safe handling:**

Avoid contact with skin and eyes.

Wear personal protective equipment.

Provide for sufficient ventilation and punctiform suction at critical points.

Avoid: Generation/formation of aerosols

Do not inhale vapor/aerosol.

Vapors/aerosols should be extracted directly at source.

Explosive / highly flammable mixtures may develop in case of insufficient ventilation and/or through use.

Only use the material in places where open light, fire and other flammable sources can be kept away.

Take precautionary measures against static discharges.

(Provide grounding of containers, equipment, pumps and extraction units).

Only use antistatic (non-sparking) tools.

Precautions against fire and explosion

Keep away from sources of ignition — no smoking.

Take precautionary measures against static discharges.

Vapors may form an explosive mixture with air.

Ignitable mixtures may form in empty containers.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage facilities and containers:**

Store in a place that is only accessible to authorized persons.

Keep away from sources of ignition — no smoking.

Keep containers tightly closed and store in a cool, well-ventilated place.

Keep only in the original container.

Use explosion-proof machinery, equipment, extraction units, instruments, etc.
Floors should be impervious, waterproof and easy to clean.

Information on storage with other products

Do not store together with: oxidizing agents, acid, concentrated; alkalis (lye), concentrated. Observe regulations for storage of flammable liquids.

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames as well as other ignition sources. No smoking. Protect from direct sunlight. (Heating causes an increase in pressure and a risk of bursting.) Storage class in accordance with TRGS 510: 3 (Flammable liquids).

7.3 Specific end uses:

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

8. Exposure Limitation and Control / Personal Protective Equipment

8.1 Control parameters

Workplace limit values (TRGS 900)

CAS No.	Designation	ppm	mg/m ³	F/m ³	Peak limit	Art
64-17-5	Ethanol	500	960		2(II)	

DNEL/DMEL values

CAS No.	Designation	Exposure route	Effect	Value
	DNEL type			
	Workers DNE, acute	Inhalation	Local	1900 mg/m ³
	Workers DNEL, long-term	Dermal	Systemic	343 mg/kg KG/d
	Workers DNEL, long-term	Inhalation	Systemic	950 mg/m ³
	Consumers DNEL, acute	Inhalation	Local	950 mg/m ³
	Consumers DNEL, long-term	Dermal	Systemic	206 mg/kg KG/d
	Consumers DNEL, long-term	Inhalation	Systemic	114 mg/m ³
	Consumers DNEL, long-term	Oral	Systemic	87 mg/kg KG/d

PNEC values

CAS No.	Designation	Value
	Environmental compartment	
64-17-5	Ethanol	
	Fresh water	0.96 mg/l
	Sea water	0.79 mg/l
	Fresh water sediment	3.6 mg/kg
	Marine sediment	2.9 mg/kg
	Soil	0.63 mg/kg
	Micro-organisms in waste water treatment plants	580 mg/l

Additional information on limit values

Ethanol:

TRGS 900, AGW (Germany): DFG Y: There is no need to be concerned about the risk of fetal damage when complying with the workplace limit values (AGW) and the biological limit values (BGW).

8.2 Exposure limitation and control

8.2.1 Appropriate engineering controls:

Adequate technical ventilation must be provided for the whole working area if local extraction is not possible or is inadequate.

8.2.2 Personal protective equipment:

Protective and hygiene measures

Do not breathe gas/vapor/spray. Change contaminated clothing. Wash hands before breaks and at the end of the working day. When using do not eat or drink. Cloths contaminated with product should not be kept in trouser pockets. Replace gloves immediately if you notice any cracks or other changes in size, color, elasticity etc.! Prepare a skin protection plan.

Eye protection:

Tightly fitting safety goggles. Eye baths must be provided and their location must be clearly marked.

Hand protection:

Only chemical protective gloves with a CE mark and four-digit test number must be worn when handling chemical agents. (See DIN EN 374).

Prepare and observe a skin protection plan!

Chemical gloves need to be selected specifically for the workplace based on the concentration and volume of hazardous substances.

It is recommended to check the chemical resistance of the above-mentioned protective gloves for special applications with the glove manufacturer.

Protective gloves should be replaced immediately in case of damage or wear

Recommended material: Butyl rubber.

Information on the breakthrough times for the substances referred to in section 3 of this safety data sheet should be obtained from the glove manufacturer.

Body protection:

Flame-proof protective clothing. Wear antistatic shoes and work clothing.

The wearing of closed chemical-resistant protective work clothing is required in addition to personal protective equipment.

After contact with skin, take off all contaminated clothing immediately and wash right away with plenty of water and soap.

Everyday clothing should be stored separately from work clothing.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapors and aerosols are generated.

Required when vapors and aerosols are generated.

Recommended respiratory protection: combined filter device (EN 14387) type A-P2.

8.2.3 Environmental exposure limitation and control

Do not empty into drains or waterways.

Avoid seepage into the ground. Inform the respective authorities if the product contaminates waterways or drains. Inform the respective authorities if the product penetrates into the soil.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical form: liquid

Color: red

Odor: solvent

Status changes

Initial boiling point and boiling range: 78 °C / 172 °F estimated

Flash point: 12 °C / 54 °F estimated

Explosion hazards

Vapors may form an explosive mixture with air. Vapors are heavier than air and spread over the floor.

Lower explosion limit: 3.5 % vol. estimated

Upper explosion limit: 15 % vol. estimated

Ignition temperature: 425 °C / 797 °F estimated

Density: not specified

Partition coefficient: not specified

9.2 Other information

Solids content not specified

10. Stability and Reactivity

10.1 Reactivity:

Flammable, risk of ignition.

10.2 Chemical stability:

The mixture is chemically stable under the recommended storage, operating and temperature conditions.

10.3 Possibility of hazardous reactions:

May form explosive/flammable vapor/air mixtures when in use.

Empty, uncleaned containers may contain product gases that form explosive mixtures with air.

10.4 Conditions to avoid:

UV radiation/sunlight.

Keep away from heat, hot surfaces, sparks, open flames as well as other ignition sources. No smoking.

Take precautionary measures against static discharges.

10.5 Incompatible materials:

Oxidizing agents, alkalis, concentrated. Acid, concentrated.

10.6 Hazardous decomposition products:

The following may be produced in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxide (NO_x). Formaldehyde. Gases/vapors that are harmful to health.

11. . Toxicological Information

11.1 Information on toxicological effects

11.1.1 Substances

Acute toxicity

The classification criteria are not met based on the data available.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Rat (inhalation): 8h (IRT)

No mortality within the stated exposure time in animal testing. Assessment was derived from products of a similar chemical structure.

CAS No.	Designation				
	Exposure routes	Method	Dose	Species	Source
64-17-5	Ethanol				
	Oral	LD50	>2000 mg/kg	Rat	OECD 401
	Dermal	LD50	>2000 mg/kg	Rabbit	OECD 402
	Inhalation (4 h) vapor	LC50	>20 mg/l	Rat	
989-38-8	9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride				
	Oral	LD50	250 mg/kg	Rat	
	Dermal	LD50	>2500 mg/kg	Rat	

Irritant and corrosive effect

Causes serious eye irritation.

Ethanol:

Irritant effect on the skin:

causes no irritation.

Irritant effect on the eye:

irritating to eyes.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Irritant effect on the skin:

causes no irritation.

Irritant effect on the eye:

risk of serious damage to eyes.

Sensitizing effects

The classification criteria are not met based on the data available.

Ethanol:

No sensitizing effect.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The classification criteria are not met based on the data available.

Ethanol:

Carcinogenicity:

none

Germ cell mutagenicity:

none

Reproductive toxicity:

none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Carcinogenicity:

no data available

Germ cell mutagenicity:

no data available

Reproductive toxicity:

no data available

Specific target organ toxicity (single exposure)

The classification criteria are not met based on the data available.

Ethanol:

none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

Specific target organ toxicity (repeated exposure)

The classification criteria are not met based on the data available.

Ethanol:

none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

Risk of aspiration

The classification criteria are not met based on the data available.

Ethanol:

Classification: none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Not applicable

Further information:

Systemic effects: After absorption of large quantities: tiredness, CNS disorders, headache, dizziness, convulsions, unconsciousness, drop in blood pressure, tachycardia

The mixture is classified as hazardous in accordance with Regulation (EC) No. 1272/2008 [CLP].

Practical experience

Observations relevant for classification

Prolonged or repeated skin contact may lead to skin degreasing and therefore to skin irritation.

Liquid splashed in the eye may cause irritation and reversible damage.

12. Ecological Information

12.1 Ecotoxicity:

Toxic to aquatic organisms with long-lasting effects.

Ethanol (cf. ethyl alcohol):

EC50: 6500 mg/l 16 h Species: *Pseudomonas putida*

LC50: > 100 mg/l 24 h Species: *Daphnia magna*

LC50: 8140 mg/l 48 h Species: *Leuciscus idus*

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Very toxic to aquatic organisms with long-lasting effects.

Microorganisms / effect on activated sludge:

EC10: 7 mg/l, *Pseudomonas putida* (DIN 38412 Part 27 (draft))

CAS No.	Designation					
	Aquatic toxicity	Method	Dose	[h [d]]	Species	Source
64-17-5	Ethanol					
	Acute fish toxicity	LC50	15300 mg/l	96 h	<i>Pimephales promelas</i> (Fathead minnow)	Flow test US-EP
	Acute crustacean toxicity	EC50	>10000 mg/l	48 h	<i>Daphnia magna</i> (water flea)	
	Acute algal toxicity	ErC50	275 mg/l	72 h	<i>Chlorella vulgaris</i>	OECD 201
989-38-8	9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride					
	Acute fish toxicity	LC50	>2.2 - <4.6 96 hmg/l		<i>Leuciscus idus</i> (orfe) golden	

12.2 Persistence and degradability

The product was not tested.

Ethanol:

Degree of elimination: > 70 %

Other information:

CSB: 1600 g O₂/kg

BSB5: 1350 gO₂/g

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

The product is readily biodegradable.

Behavior in waste water treatment plants (adsorption of activated sludge): moderate/partial elimination from the water.

CAS No.	Designation			
	Method	Value	D	Source
	Assessment			
64-17-5	Ethanol			
	Biodegradability	84%	20	
	Readily biodegradable.			

12.3 Bioaccumulation potential:

The product was not tested.

Ethanol:

Bioaccumulation potential: none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

Partition coefficient in n-Octanol/water

CAS No.	Designation	Log Pow
64-17-5	Ethanol	-0.3

BCF

CAS No.	Designation	BCF	Species	Source
64-17-5	Ethanol	0.66		

12.4 Mobility in soil

The product was not tested.

Ethanol:

The product is mobile in an aqueous environment.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

No data available

12.5 Results of PBT and vPvB assessment

The product was not tested.

Ethanol:

This substance does not meet the criteria for classification as PBT or vPvB.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

No data available

12.6 Other harmful effects:

The product was not tested.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

The product contains organically bound halogen in accordance with the formulation. It can contribute to the AOX value in the effluent from waste water treatment plants or in waterways.

12.7 Additional eco-toxicological information:

Do not discharge product unmonitored into the environment.

13. Disposal Considerations**13.1 Waste management process**

This product and its container must be disposed of as hazardous waste. Disposal of contents and containers in accordance with local/regional/international regulations.

Information relevant for waste water disposal

Do not allow to enter sewerage system.

13.2 Relevant waste legislation

The assignment of the waste code numbers /waste designations shall be carried out in accordance with EAKV in a sector- and process-specific manner.

13.3 Notes

Waste shall be separated in such a way that it can be treated separately by municipal or national waste facilities. Please observe the relevant national or regional regulations. For the U.S., please refer to <https://www.epa.gov/hw>.

13.4 Further information

Ink that is no longer usable can be returned for disposal.

14. Transport Information**14.1 Special precautions for users**

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

Overland transport (ADR/RID)

UN number UN 3175

Special regulations 216

Special regulations 47 (Not Restricted per Special Provisions 47)

Air transport (IATA/)

UN number: UN 3175
 Special regulations: A46 (Not Restricted per Special Provisions A46)
 Classification: "not restricted"

Special precautions for users

Caution: Flammable liquid substance
 The transport regulations are cited in accordance with the international regulations and in the form in, which they are applied in Germany. Possible deviations in other countries are not taken into considerations.

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

Not applicable

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

Information concerning VOC Directive 2004/42/EC: 89.1% ~ 775.54g/l

15.1.2 National regulations (Germany)

Water hazard class: 2 - hazardous to water
 Status: rule of mixture in accordance with the General Administrative Regulation under the Federal Water Act on the Classification of Substances Hazardous to Water in Water Hazard Classes (VwVws), Annex 4, No. 3

15.2 Chemical safety assessment:

A chemical safety assessment was carried out for the following substances in this mixture:
 Ethanol

16. Other Information**16.1 Abbreviations and acronyms**

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG Code	International Maritime Code for Dangerous Goods
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
OECD	Organization for Economic Co-operation and Development
EINECS	European Inventory of Existing Commercial Chemical Substances is the European Union Inventory of Existing Chemical Substances (waste materials)
ELINCS	European List of Notified Chemical Substances (in German: Europäisches Verzeichnis der auf dem Markt vorhandenen chemischen Stoffe)
CAS	Chemical Abstracts Service
LC	Lethal Concentration
LL	Lethal Load
LD	Lethal Dose
EC	Effective Concentration
EL	Effective Load
ATE	Acute Toxicity Estimate
DNEL	Derived No-effect Level
PNEC	Predicted No-effect Concentration
PBT	Persistent, Bio-accumulative, Toxic
vPvB	very Persistent and very Bio-accumulative
NOAEL	Highest dose at which there was not an observed toxic or adverse effect.
LOAEL	Lowest dose at which there was an observed toxic or adverse effect
DFG	Senate Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area of the DFG (MAK Commission) [=German Research Foundation]

16.2 Most important literature references and data sources

The data for the hazardous ingredients was taken from the most recent version of the pre-supplier's safety data sheet.

16.3 Classification of mixtures and evaluation methods used in accordance with Regulation (EC) No.

1272/2008 [CLP]
 See section 2.1 (classification).

16.4 Wording of H and EUH phrases (number and full text):

H225	Highly flammable liquid and vapor.
H301	Toxic if swallowed.
H318	Causes severe eye irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic organisms.

- H410 Very toxic to aquatic organisms with long-lasting effects.
H411 Toxic to aquatic organisms with long-lasting effects.

16.5 Training advice:

Provide appropriate information, instructions and training for users.

16.6 Other information:

The information contained in this safety data sheet reflects the latest findings, to the best of our knowledge, at the time of printing. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. If the product is mixed, blended or processed with other materials or undergoes processing, the information in this safety data sheet may not be valid for the new material produced in this way, unless expressly stated otherwise.

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