

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 7/23/2025 Version: 4.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : TrueVIS Element Ink, TE2-5YE

> TrueVIS Element Ink, TE2-7YE : 1NPE-AWJM-QDK6-YA08

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

Relevant identified uses

: Professional use Main use category : Inkjet Printing ink Function or use category

1.3. Details of the supplier of the safety data sheet

Manufacturer

UFI

Roland DG Corporation

1-1-2 Shinmiyakoda, Hamana-ku,

Hamamatsu-shi, Shizuoka-ken, 431-2103 Japan

〒431-2103

T +81-53-484-1200

Supplier

Roland DG EMEA N.V.

Bell Telephonelaan 2G, 2440 Geel, Belgium

T +32 (0) 14 57 59 11

deu-demand-planning@rolanddg.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Emergency number	Comment
Ireland	Poisons Information Centre of Ireland	+353 18 37 99 64 (medical professionals) +353 18 09 21 66 (public)	
Malta	Malta Competition and Consumer Affairs Authority (MCCAA)	+356 2395 2000 1774 helpline for accidental poisoning	
United Kingdom	Emergency number England	999 NHS 111	or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 1 H318

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage.



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2.2. Label elements

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

Hazard pictograms (CLP)

GHS05

Signal word (CLP) : Danger

Contains : Ethane, 1,1'-oxybis[2-ethoxy-; 2(3H)-Furanone, dihydro-; Ethanol, 2-[2-(2-

butoxyethoxy)ethoxy]-

Hazard statements (CLP) : H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

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 - Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethane, 1,1'-oxybis[2-ethoxy-	CAS-No.: 112-36-7 EC-No.: 203-963-7 REACH-no: 01-2119969946- 13	55 – 65	Skin Irrit. 2, H315
2(3H)-Furanone, dihydro-	CAS-No.: 96-48-0 REACH-no: 01-2119471839- 21	< 20	Acute Tox. 4 (Oral), H302 (ATE=800 mg/kg bodyweight) Eye Dam. 1, H318 STOT SE 3, H336
Dialkylene glycol dialkyl ether	-	10 – 20	Not classified
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-	CAS-No.: 143-22-6 EC-No.: 205-592-6 EC Index-No.: 603-183-00-0	1 – 10	Eye Dam. 1, H318
Resin	-	1 – 10	Not classified



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Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
Colourants	-	1 – 10	Not classified

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-	CAS-No.: 143-22-6 EC-No.: 205-592-6 EC Index-No.: 603-183-00-0	(20 ≤ C < 30) Eye Irrit. 2; H319 (30 ≤ C ≤ 100) Eye Dam. 1; H318

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

First-aid measures for first aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this

material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : None under normal conditions.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : No direct explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

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5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to

prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear

personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Store always product in container of same material as original container.

7.3. Specific end use(s)

Inkjet Printing ink.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

Ethane, 1,1'-oxybis[2-ethoxy- (112-36-7)			
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	3.43 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	50.05 mg/m³		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	1.71 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	5.96 mg/m³		
Long-term - systemic effects, dermal	1.71 mg/kg bodyweight/day		
2(3H)-Furanone, dihydro- (96-48-0)			
DNEL/DMEL (Workers)			
Acute - systemic effects, inhalation	958 mg/m³		
Long-term - systemic effects, inhalation	130 mg/m³		
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- (143-2	Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- (143-22-6)		
DNEL/DMEL (Workers)			
Acute - systemic effects, dermal	400 mg/kg bodyweight/day		
Acute - systemic effects, inhalation	96 mg/m³		
Acute - local effects, dermal	8.35 mg/cm ²		
Acute - local effects, inhalation	96 mg/m³		
Long-term - systemic effects, dermal	1005 mg/kg bodyweight/day		
Long-term - local effects, dermal	5.65 mg/cm ²		
Long-term - systemic effects, inhalation	24 mg/m³		
Long-term - local effects, inhalation	30.5 mg/m³		
DNEL/DMEL (General population)	DNEL/DMEL (General population)		
Acute - systemic effects, dermal	200 mg/kg bodyweight/day		
Acute - systemic effects, inhalation	48 mg/m³		
Acute - systemic effects, oral	103.4 mg/kg bodyweight/day		
Acute - local effects, dermal	4.173 mg/cm ²		
Acute - local effects, inhalation	48 mg/m³		
Long-term - systemic effects,oral	50.25 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	12 mg/m³		



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Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]- (143-22-6)		
Long-term - systemic effects, dermal	502.5 mg/kg bodyweight/day	
Long-term - local effects, dermal	2.823 mg/cm²	
Long-term - local effects, inhalation	15.252 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	100 mg/l	
PNEC aqua (marine water)	142.57 mg/l	
PNEC aqua (intermittent, freshwater)	22 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	11.115 mg/kg dwt	
PNEC sediment (marine water)	1.1115 mg/kg dwt	
PNEC (Soil)		
PNEC soil	11.51 mg/kg dwt	
PNEC (Oral)		
PNEC oral (secondary poisoning)	525.5 mg/kg food	
PNEC (STP)		
PNEC sewage treatment plant	199.5 mg/l	

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Eye and face protection

Eye protection:

Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear EN166 approved safety glasses or chemical splash goggles.

Skin protection

Skin and body protection:

Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.

Hand protection

Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, use protective gloves. Recommended impervious gloves is EN420/374 approved butyl rubber glove.



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Respiratory protection

Respiratory protection:

In case of inadequate ventilation and exposure limits are exceeded or if irritation or other symptoms are experienced, use a NIOSH/MSHA or European Standard EN149 approved respirator (with activated carbon layer for organic vapour).

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Wash hands immediately after handling the product. And wash it before reuse. Do not eat, drink or smoke during work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Yellow. Odour : characteristic. Odour threshold : Not available Melting point : Not applicable : Not available Freezing point : Not available Boiling point Flammability Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point : > 71 °C Auto-ignition temperature : Not available Decomposition temperature : Not available : Not available рΗ Viscosity, kinematic : Not available Solubility : Water solubility. Partition coefficient n-octanol/water (Log Kow) Not available : Not available Vapour pressure Vapour pressure at 50°C : Not available Density : Not available Relative density : 0.9 – 1 : Not available Relative vapour density at 20°C Particle characteristics : Not applicable

9.2. Other information

Other safety characteristics

VOC content : ≤ 950 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.



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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met).

Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Ethane, 1,1'-oxybis[2-ethoxy- (112-36-7)	
LD50 oral rat	4970 mg/kg Source: THOMSON
LD50 oral	4970 mg/kg
LD50 dermal rat	6700000 mg/kg Source: THOMSON
LC50 Inhalation - Rat	> 5.24 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
2(3H)-Furanone, dihydro- (96-48-0)	
LD50 oral rat	1582 mg/kg
LD50 oral	800 mg/kg
LD50 dermal	5600 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5.1 mg/l/4h
Dialkylene glycol dialkyl ether	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.14 mg/l air Animal: rat, Guideline: EU Method B.2 (Acute Toxicity (Inhalation))



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Ethanol, 2-[2-(2-butoxyethoxy)ethox	xy]- (143-22-6)
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.1 bis (Acute Oral Toxicity Fixed Dose Procedure)
LD50 oral	5170 mg/kg
LD50 dermal rabbit	3540 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 1050 - 11800
LD50 dermal	3540 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	50 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation. pH: Not available
Serious eye damage/irritation	: Causes serious eye damage. pH: Not available
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans)
2(3H)-Furanone, dihydro- (96-48-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

: Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic)

: Not classified (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability

TrueVIS Element Ink, TE2-5YE TrueVIS Element Ink, TE2-7YE	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

No additional information available



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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

: Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste treatment methods

Sewage disposal recommendations : Disposal must be done according to official regulations. : Disposal must be done according to official regulations. Product/Packaging disposal recommendations

Additional information : Do not re-use empty containers.

: 08 03 12* - waste ink containing dangerous substances European List of Waste (LoW, EC 2000/532)

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID n	14.1. UN number or ID number				
Not regulated for transport					
14.2. UN proper shippin	g name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.3. Transport hazard o	class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.4. Packing group	14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.5. Environmental hazards					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
No supplementary information available					



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14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List < 0.1% or SCL.

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : ≤ 950 g/l

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)



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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	



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Abbreviations and acronyms:		
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disruptor	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

RDG Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.