

**1 Identification of substance**

• **Product details**

• **Trade name:** GLOSS VINYL SOLVENT-BASED SCREEN PRINTING INKS

• **Product code:**

GVYL-010(K83398) GVYL-014(K83399) GVYL-020(K92070) GVYL-030(K82239) GVYL-031(K82238) GVYL-033(K80587) GVYL-034(K80588) GVYL-035(K82240) GVYL-039(K82242) GVYL-040(K82237) GVYL-041(K82236) GVYL-050(K82235) GVYL-052(K82234) GVYL-070(K81131) GVYL-150(K90045) GVYL-152(K90047) GVYL-251(K90991) GVYL-350(K90050) GVYL-351(K90049) GVYL-450(K90062) GVYL-501(K80211) GVYL-504(K80539) GVYL-700(K80207) GVYL-701(K82249) GVYL-800(K80208) GVYL-801(K80540) **GVYL-802(K80909)** GVYL-901(K80214) K95543

• **Application of the substance / the preparation** Printing inks

• **Manufacturer/Supplier:**

FUJIFILM North America Corporation  
20 West 14th Avenue  
North Kansas City, Missouri 64116

240-0002 = GVYL-802

Information phone: (913) 342-4060

24 hour emergency phone: (816) 587-8178

• **Information department:** Environmental, Health & Safety Department

**2 Composition/Data on components**

• **Chemical characterization**

• **Description:** Mixture of the substances listed below with nonhazardous additions.

• **Hazardous components:**

111-76-2	ethylene glycol monobutyl ether Warning: ⚠ 3.1.O/4, 3.1.D/4, 3.1.I/4, 3.2/2, 3.3/2A	10-30%
34590-94-8	Dipropylene glycol monomethyl ether Warning: ⚠ 3.8/3; 2.6/4	10-30%
64742-94-5	Solvent naphtha (petroleum), heavy arom. Danger: ⚠ 3.10/1	5-10%
108-94-1	cyclohexanone Warning: ⚠ 2.6/3; ⚠ 3.1.I/4	3-7%
	Acrylated resins - proprietary Warning: ⚠ 3.2/2, 3.3/2A, 3.4.S/1, 3.8/3	1-5%
64742-95-6	Solvent naphtha (petroleum), light arom. Danger: ⚠ 3.6/1B, 3.10/1	0.5-1.5%
91-20-3	naphthalene Warning: ⚠ 3.6/2; ⚠ 4.1.C/1; ⚠ 3.1.O/4	0.5-1.5%
95-63-6	1,2,4-trimethylbenzene Warning: ⚠ 2.6/3; ⚠ 3.1.I/4, 3.2/2, 3.3/2A, 3.8/3 ⚠ 4.1.C/2	0.1-1%

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8052-41-3	Stoddard solvent	(Contd. of page 1)
	Danger:  3.6/1B, 3.10/1	0.1-1%

### 3 Hazards identification

• **Hazard description:**



Harmful

• **Information pertaining to particular dangers for man and environment:**

Flammable.

Harmful by inhalation, in contact with skin and if swallowed.

Irritating to eyes.

Limited evidence of a carcinogenic effect.

Harmful to aquatic organisms.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking

Vapours may cause drowsiness and dizziness

• **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

• **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 0

• **HMIS-ratings (scale 0 - 4)**

HEALTH	2	2
FIRE	2	2
REACTIVITY	0	0

• **GHS label elements**



Danger

3.10/1 - May be fatal if swallowed and enters airways.

3.6/2 - Suspected of causing cancer.



Warning

2.6/3 - Flammable liquid and vapour.

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**Warning**

- 3.1/4 - Harmful if swallowed.
- 3.1/4 - Harmful in contact with skin.
- 3.1/4 - Harmful if inhaled.
- 3.3/2A - Causes serious eye irritation.
- 3.8/3 - May cause drowsiness or dizziness.

4.1/3 - Harmful to aquatic life.

**Prevention:**

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash thoroughly after handling.
- Do no eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Use personal protective equipment as required.

**Response:**

- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- IF ON SKIN: Wash with plenty of soap and water.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF exposed or concerned: Get medical advice/attention.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- Specific measures (see on this label).
- Rinse mouth.
- Do NOT induce vomiting.
- If eye irritation persists: Get medical advice/attention.
- Wash contaminated clothing before reuse.
- In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

**Storage:**

- Store in a well-ventilated place. Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- Store locked up.

**Disposal:**

- Dispose of contents/container in accordance with local/regional/national/international regulations.

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#### 4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Treatment** If swallowed or in case of vomiting, danger of entering the lungs.

#### 5 Fire fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

#### 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Dispose of the collected material according to regulations.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

#### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Store in cool, dry place in tightly closed receptacles.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

### 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

#### 111-76-2 ethylene glycol monobutyl ether (10-30%)

PEL 240 mg/m<sup>3</sup>, 50 ppm  
Skin

REL 24 mg/m<sup>3</sup>, 5 ppm  
Skin

TLV 97 mg/m<sup>3</sup>, 20 ppm

#### 34590-94-8 Dipropylene glycol monomethyl ether (10-30%)

PEL 600 mg/m<sup>3</sup>, 100 ppm  
Skin

REL Short-term value: 900 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 600 mg/m<sup>3</sup>, 100 ppm  
Skin

TLV Short-term value: 909 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 606 mg/m<sup>3</sup>, 100 ppm  
Skin

#### 108-94-1 cyclohexanone (3-7%)

PEL 200 mg/m<sup>3</sup>, 50 ppm

REL 100 mg/m<sup>3</sup>, 25 ppm  
Skin

TLV 50 mg/m<sup>3</sup>, 20 ppm  
Skin

#### 91-20-3 naphthalene (0.5-1.5%)

PEL 50 mg/m<sup>3</sup>, 10 ppm

REL Short-term value: 75 mg/m<sup>3</sup>, 15 ppm  
Long-term value: 50 mg/m<sup>3</sup>, 10 ppm

TLV Short-term value: 79 mg/m<sup>3</sup>, 15 ppm  
Long-term value: 52 mg/m<sup>3</sup>, 10 ppm  
Skin

#### 8052-41-3 Stoddard solvent (0.1-1%)

PEL 2900 mg/m<sup>3</sup>, 500 ppm

REL Short-term value: C 1800\* mg/m<sup>3</sup>  
Long-term value: 350 mg/m<sup>3</sup>  
\*15-min

TLV 525 mg/m<sup>3</sup>, 100 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.

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*Avoid contact with the eyes and skin.*

· **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.

· **Protection of hands:** Solvent resistant gloves

· **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*

· **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

· **Eye protection:** Safety glasses

· **Body protection:** Protective work clothing

### 9 Physical and chemical properties

#### · General Information

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic

#### · Change in condition

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 153°C (307°F)

· **Flash point:** 43°C (109°F)

· **Ignition temperature:** 240.0°C (464°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

#### · Explosion limits:

**Lower:** 1.1 Vol %

**Upper:** 14.0 Vol %

· **Vapor pressure at 20°C (68°F):** 1.2 hPa (1 mm Hg)

· **Density at 20°C (68°F):** 8.2-12.4 lb./gal

#### · Solubility in / Miscibility with

**Water:** Not miscible or difficult to mix.

#### · Solvent content:

**Volatile organic compounds:** VOC content of material: 457-598 grams per liter.

VOC content of coating less water and exempt solvents: 457-598 grams per liter.

### 10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Dangerous reactions** No dangerous reactions known.

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· **Dangerous products of decomposition:** Carbon monoxide and carbon dioxide

### 11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**64742-95-6 Solvent naphtha (petroleum), light arom.**

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

**91-20-3 naphthalene**

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rat)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

### 12 Ecological information

· **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

### 13 Disposal considerations

· **Product:**

· **Recommendation:**

Hand over to hazardous waste disposers.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

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### 14 Transport information

· **DOT regulations:**



- **Hazard class:** 3
- **Identification number:** UN1210
- **Proper shipping name (technical name):** PRINTING INK
- **Label:** 3

· **Land transport ADR/RID (cross-border):**



- **ADR/RID class:** 3 Flammable liquids
- **UN-Number:** 1210
- **Packaging group:** III
- **Description of goods:** 1210 PRINTING INK

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1210
- **Label:** 3
- **Packaging group:** III
- **Marine pollutant:** No
- **Proper shipping name:** PRINTING INK

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1210
- **Label:** 3
- **Packaging group:** III
- **Proper shipping name:** PRINTING INK

- **UN "Model Regulation":** UN1210, PRINTING INK, 3, III

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## 15 Regulations

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

111-76-2	ethylene glycol monobutyl ether
91-20-3	naphthalene
95-63-6	1,2,4-trimethylbenzene
108-88-3	toluene

- **TSCA (Toxic Substances Control Act): All ingredients are listed.**

- **California Proposition 65**

- **California Proposition 65 chemicals known to cause cancer:**

91-20-3	naphthalene
79-01-6	trichloroethylene
140-88-5	ethyl acrylate
75-01-4	vinyl chloride
71-43-2	benzene

- **California Proposition 65 chemicals known to cause reproductive toxicity:**

108-88-3	toluene
71-43-2	benzene

- **California Proposition 65 chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **California Proposition 65 chemicals known to cause reproductive toxicity for males:**

71-43-2	benzene
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- **California Proposition 65 chemicals known to cause developmental toxicity:**

108-88-3	toluene
71-43-2	benzene

- **Carcinogeny categories**

- **EPA (Environmental Protection Agency)**

111-76-2	ethylene glycol monobutyl ether	CBD
91-20-3	naphthalene	CBD
108-88-3	toluene	II

- **IARC (International Agency for Research on Cancer)**

111-76-2	ethylene glycol monobutyl ether	3
108-94-1	cyclohexanone	3
	Vinyl chloride-vinyl acetate copolymer	3
91-20-3	naphthalene	2B
108-88-3	toluene	3

- **NTP (National Toxicology Program)**

91-20-3	naphthalene	R
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· <b>TLV (Threshold Limit Value established by ACGIH)</b>		
111-76-2	ethylene glycol monobutyl ether	A3
108-94-1	cyclohexanone	A3
91-20-3	naphthalene	A4
108-88-3	toluene	A4

· <b>MAK (German Maximum Workplace Concentration)</b>		
111-76-2	ethylene glycol monobutyl ether	4
108-94-1	cyclohexanone	3B
91-20-3	naphthalene	2

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**  
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**  
None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Harmful

· **Hazard-determining components of labelling:**

cyclohexanone

Stoddard solvent

· **Risk phrases:**

Flammable.

Harmful by inhalation, in contact with skin and if swallowed.

Irritating to eyes.

Limited evidence of a carcinogenic effect.

Harmful to aquatic organisms.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking

Vapours may cause drowsiness and dizziness

· **Safety phrases:**

Keep out of the reach of children.

Keep container tightly closed in a cool place

Keep away from sources of ignition - No smoking.

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
II	25.7
III	16.7

· **Water hazard class: Water hazard class 3 (Self-assessment): extremely hazardous for water.**

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**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing MSDS:** Product safety department

· **Contact:** Product safety department

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)*

*ICAO: International Civil Aviation Organization*

*ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

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