Safety Data Sheet
acc. to OSHA HCS

Printing date 05/25/2022 Reviewed on 05/25/2022

1 Identification

· **Product identifier**

· **Trade name: Series 784**

· **Article number: Series** 784

· **Application of the substance / the mixture** Printing inks

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**

DECO TECHnology Group Inc.
PRINTCOLOR SCREEN AG
TEL (714) 639-3326
FAX (714) 639-2261

· **Information department:** Product safety department
· **Emergency telephone number:** 800-535-5053

2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS02 Flame

Flammable Liquids 3	H226 Flammable liquid and vapor.

GHS08 Health hazard

Sensitization - Respiratory 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carcinogenicity 2	H351 Suspected of causing cancer. Route of exposure: Inhalation.
Toxic to Reproduction 2	H361 Suspected of damaging fertility or the unborn child.

GHS05 Corrosion

Eye Damage 1	H318 Causes serious eye damage.

GHS07

Sensitization - Skin 1	H317 May cause an allergic skin reaction.
Specific Target Organ Toxicity - Single Exposure 3	H336 May cause drowsiness or dizziness.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS05 GHS07 GHS08

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· **Signal word** Danger

· **Hazard-determining components of labeling:**
butyl glycollate
2-ethoxy-1-methylethyl acetate
Carbon black
maleic anhydride
4-isocyanatosulphonyltoluene
methyl methacrylate

· **Hazard statements**
Flammable liquid and vapor.
Causes serious eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing cancer. Route of exposure: Inhalation.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.

· **Precautionary statements**
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Take precautionary measures against static discharge.
Avoid breathing vapours.
Wear protective gloves / eye protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If experiencing respiratory symptoms: Call a poison center/doctor.
Wash contaminated clothing before reuse.
In case of fire: Use CO2, powder or water spray to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 3
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *3
Fire = 2
Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**		
CAS: 54839-24-6	2-ethoxy-1-methylethyl acetate	≥10-<20%
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	≥10-<20%
CAS: 4435-53-4	3-methoxybutyl acetate	2.5-10%
CAS: 7397-62-8	butyl glycollate	≥3-≤10%
CAS: 1333-86-4	Carbon black	1-2.5%
CAS: 4083-64-1	4-isocyanatosulphonyltoluene	≥0.1-<1%
CAS: 868-77-9	2-hydroxyethyl methacrylate	≥0.1-<0.5%
CAS: 61791-15-9	Kokosalkylamin mit EO, Acetat	<0.5%
CAS: 80-62-6	methyl methacrylate	≥0.1-<0.5%
CAS: 108-31-6	maleic anhydride	≥0.001-<0.1%

4 First-aid measures

· **Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** If symptoms persist consult doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, 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 arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Do not flush with water or aqueous cleansing agents
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
CAS: 13463-67-7	titanium dioxide	30 mg/m³
CAS: 1333-86-4	Carbon black	9 mg/m³
CAS: 123-86-4	n-butyl acetate	5 ppm
CAS: 868-77-9	2-hydroxyethyl methacrylate	1.9 mg/m³
CAS: 80-62-6	methyl methacrylate	17 ppm
CAS: 7631-86-9	silicon dioxide, chemically prepared	18 mg/m³
CAS: 100-42-5	styrene	20 ppm
CAS: 100-41-4	ethylbenzene	33 ppm
CAS: 70657-70-4	2-methoxypropyl acetate	50 ppm
CAS: 1344-28-1	aluminium oxide	15 mg/m³
CAS: 7664-38-2	phosphoric acid	3 mg/m³
CAS: 108-83-8	2,6-dimethylheptan-4-one	75 ppm
CAS: 108-31-6	maleic anhydride	0.2 ppm
CAS: 91-20-3	naphthalene	15 ppm

· **PAC-2:**		
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
CAS: 13463-67-7	titanium dioxide	330 mg/m³
CAS: 1333-86-4	Carbon black	99 mg/m³
CAS: 123-86-4	n-butyl acetate	200 ppm
CAS: 868-77-9	2-hydroxyethyl methacrylate	21 mg/m³
CAS: 80-62-6	methyl methacrylate	120 ppm
CAS: 7631-86-9	silicon dioxide, chemically prepared	740 mg/m³
CAS: 100-42-5	styrene	130 ppm
CAS: 100-41-4	ethylbenzene	1100* ppm
CAS: 70657-70-4	2-methoxypropyl acetate	1,000 ppm
CAS: 1344-28-1	aluminium oxide	170 mg/m³
CAS: 7664-38-2	phosphoric acid	30 mg/m³
CAS: 108-83-8	2,6-dimethylheptan-4-one	330 ppm
CAS: 108-31-6	maleic anhydride	2 ppm
CAS: 91-20-3	naphthalene	83 ppm

· **PAC-3:**		
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
CAS: 13463-67-7	titanium dioxide	2,000 mg/m³
CAS: 1333-86-4	Carbon black	590 mg/m³
CAS: 123-86-4	n-butyl acetate	3000* ppm
CAS: 868-77-9	2-hydroxyethyl methacrylate	1,000 mg/m³
CAS: 80-62-6	methyl methacrylate	570 ppm
CAS: 7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m³
CAS: 100-42-5	styrene	1100* ppm
CAS: 100-41-4	ethylbenzene	1800* ppm
CAS: 70657-70-4	2-methoxypropyl acetate	5,000 ppm
CAS: 1344-28-1	aluminium oxide	990 mg/m³
CAS: 7664-38-2	phosphoric acid	150 mg/m³
CAS: 108-83-8	2,6-dimethylheptan-4-one	2000* ppm

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CAS: 108-31-6	maleic anhydride	20 ppm
CAS: 91-20-3	naphthalene	500 ppm

7 Handling and storage

· **Handling:**
· **Precautions for safe handling** No special precautions are necessary if used correctly.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Storage class:** 3
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

CAS: 108-65-6 2-methoxy-1-methylethyl acetate	
WEEL	Long-term value: 50 ppm
CAS: 1333-86-4 Carbon black	
PEL	Long-term value: 3.5 mg/m³
REL	Long-term value: 3.5* mg/m³ *0.1 in presence of PAHs;See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m³ *inhalable fraction, A3
CAS: 80-62-6 methyl methacrylate	
PEL	Long-term value: 410 mg/m³, 100 ppm
REL	Long-term value: 410 mg/m³, 100 ppm
TLV	Short-term value: 100 ppm Long-term value: 50 ppm DSEN, A4
CAS: 108-31-6 maleic anhydride	
PEL	Long-term value: 1 mg/m³, 0.25 ppm
REL	Long-term value: 1 mg/m³, 0.25 ppm
TLV	Long-term value: 0.01* mg/m³ DSEN, RSEN;*inh. fraction + vapor, A4

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

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
· **Breathing equipment:** Not required.

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· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
Butyl rubber, BR

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	According to product specification
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>140 °C (>284 °F)
· **Flash point:**	50-55 °C (122-131 °F) (Abel Pensky)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	315 °C (599 °F)
· **Decomposition temperature:**	Not determined.
· **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:	1.5 Vol %
Upper:	10.8 Vol %

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· **Vapor pressure at 20 °C (68 °F):**	3.4 hPa (2.6 mm Hg)
· **Density at 20 °C (68 °F):**	>1.38-<1.4 g/cm³ (>11.52-<11.68 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with Water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic at 20 °C (68 °F):	4,000-8,000 mPas
Kinematic:	Not determined.
· **Solvent separation test**	
VOC content:	≥19.87-<20.03 % >276.4-<280.5 g/l / >2.31-<2.34 lb/gal
VOC (EC)	≥19.87-<20.03 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
CAS: 13463-67-7	titanium dioxide	2B
CAS: 1333-86-4	Carbon black	2B
CAS: 80-62-6	methyl methacrylate	3
CAS: 7631-86-9	silicon dioxide, chemically prepared	3
CAS: 1330-20-7	xylene	3
CAS: 100-42-5	styrene	2A
CAS: 100-41-4	ethylbenzene	2B
CAS: 91-20-3	naphthalene	2B

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· NTP (National Toxicology Program)		
CAS: 100-42-5	styrene	R
CAS: 91-20-3	naphthalene	R

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

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
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.

14 Transport information

· **UN-Number**	
· **DOT, IATA**	UN1210
· **ADR, ADN, IMDG**	Void
· **UN proper shipping name**	
· **DOT**	Printing ink
· **ADR, ADN, IMDG**	Void
· **IATA**	PRINTING INK

· **Transport hazard class(es)**

· **DOT**

· **Class**	3 Flammable liquids
· **Label**	3

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· **ADR**	
· **Class**	Void Kein Gefahrgut <450l gemäss ADR 2.2.3.1.5
· **ADN/R Class:**	Void
· **IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, IATA**	III
· **ADR, IMDG**	Void
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	Void

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.

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

CAS: 80-62-6	methyl methacrylate
CAS: 100-42-5	styrene
CAS: 100-41-4	ethylbenzene
CAS: 1344-28-1	aluminium oxide
CAS: 7664-38-2	phosphoric acid
CAS: 108-31-6	maleic anhydride
CAS: 91-20-3	naphthalene

· **TSCA (Toxic Substances Control Act):**
All components have the value ACTIVE.

· **Hazardous Air Pollutants**

CAS: 80-62-6	methyl methacrylate
CAS: 100-42-5	styrene
CAS: 100-41-4	ethylbenzene
CAS: 108-31-6	maleic anhydride
CAS: 91-20-3	naphthalene

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· **Proposition 65**

· **Chemicals known to cause cancer:**	
CAS: 1333-86-4	Carbon black
CAS: 100-42-5	styrene

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**		
CAS: 80-62-6	methyl methacrylate	E, NL
CAS: 1330-20-7	xylene	I
CAS: 100-41-4	ethylbenzene	D
CAS: 91-20-3	naphthalene	C, CBD

· **TLV (Threshold Limit Value)**		
CAS: 13463-67-7	titanium dioxide	A4
CAS: 1333-86-4	Carbon black	A4
CAS: 80-62-6	methyl methacrylate	A4
CAS: 1330-20-7	xylene	A4
CAS: 100-42-5	styrene	A4
CAS: 100-41-4	ethylbenzene	A3
CAS: 1344-28-1	aluminium oxide	A4
CAS: 108-31-6	maleic anhydride	A4
CAS: 91-20-3	naphthalene	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
CAS: 13463-67-7	titanium dioxide
CAS: 1333-86-4	Carbon black

· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS05 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
butyl glycollate
2-ethoxy-1-methylethyl acetate
Carbon black
maleic anhydride
4-isocyanatosulphonyltoluene
methyl methacrylate
· **Hazard statements**
Flammable liquid and vapor.
Causes serious eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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May cause an allergic skin reaction.
Suspected of causing cancer. Route of exposure: Inhalation.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.

· **Precautionary statements**
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Take precautionary measures against static discharge.
Avoid breathing vapours.
Wear protective gloves / eye protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If experiencing respiratory symptoms: Call a poison center/doctor.
Wash contaminated clothing before reuse.
In case of fire: Use CO_2, powder or water spray to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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 SDS:** Product safety department
· **Contact:** hse@printcolor.ch
· **Date of preparation / last revision** 05/25/2022 / 5
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flammable Liquids 3: Flammable liquids – Category 3
Eye Damage 1: Serious eye damage/eye irritation – Category 1
Sensitization - Respiratory 1: Respiratory sensitisation – Category 1
Sensitization - Skin 1: Skin sensitisation – Category 1
Carcinogenicity 2: Carcinogenicity – Category 2
Toxic to Reproduction 2: Reproductive toxicity – Category 2
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3