Safety Data Sheet
acc. to OSHA HCS

Printing date 03/16/2023 Reviewed on 03/16/2023

1 Identification

· **Product identifier**

· **Trade name: Series 533 (Low migration)**

· **Article number: Series** 533

· **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**

GHS08 Health hazard

Carcinogenicity 2	H351 Suspected of causing cancer. Route of exposure: Inhalation.

GHS07

Eye Irritation 2A	H319 Causes serious eye irritation.
Sensitization - Skin 1	H317 May cause an allergic skin reaction.

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

GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labeling:**
propylidynetrimethanol, ethoxylated, esters with acrylic acid
Carbon black
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid
Neopentylglycol prooxylated diacrylate
ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate
· **Hazard statements**
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer. Route of exposure: Inhalation.
· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

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Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
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.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2
Fire = 1
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

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

· **Dangerous components:**		
CAS: 28961-43-5	propylidynetrimethanol, ethoxylated, esters with acrylic acid	≥10-≤25%
CAS: 55818-57-0	4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	≥10-≤25%
CAS: 84170-74-1	Neopentylglycol prooxylated diacrylate	10-25%
CAS: 84434-11-7	ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	2.5-10%
CAS: 1333-86-4	Carbon black	≥0.1-<1%

4 First-aid measures

· **Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately rinse with water.
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:** If symptoms persist consult doctor.

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· **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:** Use fire fighting measures that suit the environment.
· **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** Not required.
· **Environmental precautions:** No special measures required.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
· **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
CAS: 13463-67-7	titanium dioxide	30 mg/m³
CAS: 63148-62-9	Polydimethylsiloxan	65 mg/m³
CAS: 1333-86-4	Carbon black	9 mg/m³
CAS: 7631-86-9	silicon dioxide, chemically prepared	18 mg/m³
CAS: 546-93-0	Magnesite	45 mg/m³
CAS: 14808-60-7	Quartz (SiO2)	0.075 mg/m³
CAS: 97-88-1	n-butyl methacrylate	19 mg/m³
CAS: 56-81-5	glycerol	45 mg/m³
CAS: 80-62-6	methyl methacrylate	17 ppm
CAS: 101-02-0	triphenyl phosphite	4.8 mg/m³
CAS: 150-76-5	mequinol	15 mg/m³

· **PAC-2:**		
CAS: 13463-67-7	titanium dioxide	330 mg/m³
CAS: 63148-62-9	Polydimethylsiloxan	720 mg/m³
CAS: 1333-86-4	Carbon black	99 mg/m³
CAS: 7631-86-9	silicon dioxide, chemically prepared	740 mg/m³
CAS: 546-93-0	Magnesite	260 mg/m³
CAS: 14808-60-7	Quartz (SiO2)	33 mg/m³
CAS: 97-88-1	n-butyl methacrylate	210 mg/m³
CAS: 56-81-5	glycerol	180 mg/m³
CAS: 80-62-6	methyl methacrylate	120 ppm
CAS: 101-02-0	triphenyl phosphite	53 mg/m³

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CAS: 150-76-5	mequinol	49 mg/m³

· **PAC-3:**

CAS: 13463-67-7	titanium dioxide	2,000 mg/m³
CAS: 63148-62-9	Polydimethylsiloxan	4,300 mg/m³
CAS: 1333-86-4	Carbon black	590 mg/m³
CAS: 7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m³
CAS: 546-93-0	Magnesite	1,600 mg/m³
CAS: 14808-60-7	Quartz (SiO2)	200 mg/m³
CAS: 97-88-1	n-butyl methacrylate	1,300 mg/m³
CAS: 56-81-5	glycerol	1,100 mg/m³
CAS: 80-62-6	methyl methacrylate	570 ppm
CAS: 101-02-0	triphenyl phosphite	320 mg/m³
CAS: 150-76-5	mequinol	320 mg/m³

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Keep away from heat and direct sunlight.
Open and handle receptacle with care.
· **Information about protection against explosions and fires:**
Keep respiratory protective device available.

· **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:**
Store away from foodstuffs.
Store away from oxidizing agents.
· **Further information about storage conditions:**
Protect from frost.
Protect from exposure to the light.
· **Storage class:** 10
· **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 constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

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

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

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· **Exposure controls**
· **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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **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:**
Nitrile rubber, NBR
· **Eye protection:**

Goggles recommended during refilling.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Viscous
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:	>100 °C (>212 °F)

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· **Flash point:**	>100 °C (>212 °F) (Abel Pensky)
· **Flammability (solid, gaseous):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Ignition temperature:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure:**	Not determined.
· **Density at 20 °C (68 °F):**	>1.1 g/cm³ (>9.18 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):	3,000-5,000 mPas
Kinematic:	Not determined.
· **Solvent separation test**	
VOC content:	0.00 % 0.0 g/l / 0.00 lb/gal
VOC (EC)	0.00 %
· **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**
Reacts with strong oxidizing agents.
Photoreactive.
· **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:** Irritating effect.
· **Sensitization:** Sensitization possible through skin contact.

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· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
CAS: 13463-67-7	titanium dioxide	2B
CAS: 14807-96-6	Talc (Mg3H2(SiO3)4)	3
CAS: 1333-86-4	Carbon black	2B
CAS: 7631-86-9	silicon dioxide, chemically prepared	3
CAS: 15625-89-5	2,2-bis(acryloyloxymethyl)butyl acrylate	2B
CAS: 14808-60-7	Quartz (SiO2)	1
CAS: 128-37-0	Butylated hydroxytoluene	3
CAS: 80-62-6	methyl methacrylate	3

· **NTP (National Toxicology Program)**		
CAS: 14808-60-7	Quartz (SiO2)	K

· **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 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **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** Void

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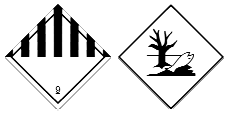
· **ADR, IMDG, IATA**	UN3082
· **UN proper shipping name**	
· **DOT**	Void
· **ADR**	Not restricted good </= 5 Kg/L according to SV 375 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid, Neopentylglycol prooxylated diacrylate)
· **IMDG**	Not restricted good </= 5 Kg/L according to 2.10.2.7 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid, Neopentylglycol prooxylated diacrylate), MARINE POLLUTANT
· **IATA**	Not restricted good </= 5 Kg/L according to SP A197 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid, Neopentylglycol prooxylated diacrylate)
· **Transport hazard class(es)**	
· **DOT**	
· **Class**	Void
· **ADR**	
· **Class**	9 Miscellaneous dangerous substances and articles
· **Label**	9
· **IMDG, IATA**	
· **Class**	9 Miscellaneous dangerous substances and articles Not restricted good
· **Label**	9
· **Packing group**	
· **DOT**	Void
· **ADR, IMDG, IATA**	III
· **Environmental hazards:**	
· **Marine pollutant:**	No Yes Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **Special marking (IATA):**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Miscellaneous dangerous substances and articles
· **Hazard identification number (Kemler code):**	90
· **EMS Number:**	F-A,S-F

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· **Stowage Category**	A
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE, ESTERS WITH ACRYLIC ACID, NEOPENTYLGLYCOL PROOXYLATED DIACRYLATE), 9, III

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

· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

CAS: 80-62-6	methyl methacrylate

· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 1333-86-4	Carbon black
CAS: 15625-89-5	2,2-bis(acryloyloxymethyl)butyl acrylate
CAS: 14808-60-7	Quartz (SiO2)

· **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.

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· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**		
CAS: 80-62-6	methyl methacrylate	E, NL

· **TLV (Threshold Limit Value)**		
CAS: 13463-67-7	titanium dioxide	A4
CAS: 14807-96-6	Talc (Mg3H2(SiO3)4)	A4
CAS: 1333-86-4	Carbon black	A4
CAS: 14808-60-7	Quartz (SiO2)	A2
CAS: 128-37-0	Butylated hydroxytoluene	A4
CAS: 80-62-6	methyl methacrylate	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
CAS: 13463-67-7	titanium dioxide
CAS: 1333-86-4	Carbon black
CAS: 14808-60-7	Quartz (SiO2)

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

GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labeling:**
propylidynetrimethanol, ethoxylated, esters with acrylic acid
Carbon black
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid
Neopentylglycol prooxylated diacrylate
ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate
· **Hazard statements**
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer. Route of exposure: Inhalation.
· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
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.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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· **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** 03/16/2023
· **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
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Sensitization - Skin 1: Skin sensitisation – Category 1
Carcinogenicity 2: Carcinogenicity – Category 2