

**1. Identification**

<b>Product identifier</b>	<b>UVgel 460 ink Yellow</b>	
<b>Other means of identification</b>		
<b>Article Number</b>	1070104728,1070110614	
<b>Other means of identification</b>		
<b>Product code</b>	1965C040AA, 1965C065AA	
<b>Recommended use</b>	Inkjet printing ink.	
<b>Recommended restrictions</b>	Other uses not recommended. Other uses not recommended.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Supplier</b>	Canon U.S.A., Inc.	
<b>Address</b>	One Canon Park, Melville, NY 11747	
<b>Country</b>	United States	
<b>Telephone Number</b>	1-800-OK-CANON	
<b>E-mail Address</b>	sds-hq@cpp.canon	
<b>Emergency Telephone Number</b>		
<b>CHEMTREC</b>	+1 (800) 424-9300 (24-hour safety information)	
<b>Supplier</b>	Canon Canada Inc.	
<b>Address</b>	6390 Dixie Road, Mississauga, ON, L5T 1P7	
<b>Country</b>	Canada	
<b>Telephone Number</b>	905-795-1111	
<b>Emergency Telephone Number</b>		
<b>CHEMTREC</b>	+1-703-741-5500 (24-hour safety information)	
<b>NCEC Service</b>	+1 (866) 928-0789 For chemical emergencies only.	

**2. Hazard(s) identification**

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 1B
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**


<b>Signal word</b>	Danger	
<b>Hazard statement</b>	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer. May damage fertility or the unborn child. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.	
<b>Disposal</b>	Not applicable.	

<b>Prevention</b>	Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves and eye/face protection.
<b>Response</b>	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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.
<b>Storage</b>	Not applicable.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate		66492-51-1	40 - < 60
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE		84170-74-1	5 - <10
2-Isopropyl-9H-thioxanthen-9-one		5495-84-1	1 - < 5
2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2-aminoethanol		67906-98-3	1 - < 5
Ethyl 4-dimethylaminobenzoate		10287-53-3	1 - < 5
Alcohol*		Proprietary*	1 - <3
TRIMETHYLOLPROPANE TRIACRYLATE		15625-89-5	1 - <3
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]		1393932-71-2	1 - <2.5
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes		68511-62-6	1 - <2.5
HEXAMETHYLENE DIACRYLATE (HDDA)		13048-33-4	< 1
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide		162881-26-7	< 1

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing agent suitable for type of surrounding fire.
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<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Not applicable.
<b>Special protective equipment and precautions for firefighters</b>	Wear suitable protective equipment.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

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.

#### US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H) -pyrimidinetrione complexes (CAS 68511-62-6)	PEL	1 mg/m <sup>3</sup>

#### NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H) -pyrimidinetrione complexes (CAS 68511-62-6)	IDLH	10 mg/m <sup>3</sup>

**US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)**

Components	Type	Value
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H) -pyrimidinetrione complexes (CAS 68511-62-6)	TWA	0.015 mg/m <sup>3</sup>

**US. OARS. Workplace Environmental Exposure Level (WEEL) Guide**

Components	Type	Value
HEXAMETHYLENE DIACRYLATE (HDDA) (CAS 13048-33-4)	TWA	1 mg/m <sup>3</sup>
TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5)	TWA	0.11 ppm 1 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines****US WEEL Guides: Skin designation**

TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5) Can be absorbed through the skin.

**Appropriate engineering controls** Provide adequate ventilation. See operator manual or safety data sheet of the printer.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If contact is likely, safety glasses with side shields are recommended.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.: Ansell Microflex ® 93-260 (240 minutes)

**Other** No special protective equipment required.

**Respiratory protection** Not required during normal intended use of this product.

**Thermal hazards** Not normally needed.

**General hygiene considerations** Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties****Appearance**

**Physical state** Liquid.

**Form** Liquid.

**Color** Yellow

**Odor** Very faint.

**Odor threshold** Not available.

**pH** Not applicable

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** 282.2 °F (139.0 °C) Closed Cup

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Explosive limit - lower (%)** Not applicable

**Explosive limit - upper (%)** Not applicable

**Vapor pressure** <70 hPa at 70 C

**Vapor density** Not available.

**Relative density** Not available.

Material name: UVgel 460 ink Yellow

1965C040AA, 1965C065AA Version #: 6.1 Revision date: 12-08-2023 Issue date: 04-11-2019

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<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	572 °F (300 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	190 - 250 mPa·s at 17 C 14.5 mPa·s at 70 C
<b>Other information</b>	
<b>Density</b>	1.11 g/cm <sup>3</sup> at 17 C 1.07 g/cm <sup>3</sup> at 70 C 0.90 g/cm <sup>3</sup> estimated
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>VOC</b>	3.24 % 2010/75/EU @36°C 1.87 % EPA Method 24 estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Health injuries are not known or expected under normal use.

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

Components	Species	Test Results
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(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate (CAS 66492-51-1)

#### Acute

#### **Dermal**

LD50	Rabbit	> 2000 mg/kg
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#### **Oral**

LD50	Rat	> 2000 mg/kg
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2-Isopropyl-9H-thioxanthen-9-one (CAS 5495-84-1)

#### Acute

#### **Dermal**

*Solid*

LD50	Rabbit	> 2000 mg/kg
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#### **Oral**

*Solid*

LD50	Rat	> 2000 mg/kg
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Components	Species	Test Results
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2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] (CAS 1393932-71-2)

**Acute**

**Dermal**

LD50 Rat > 2000 mg/kg, 24 Hours

**Inhalation**

*Vapor*

LC50 Rat > 0.41 mg/l, 7 Hours Read across

**Oral**

LD50 Rat > 5000 mg/kg OECD401

Ethyl 4-dimethylaminobenzoate (CAS 10287-53-3)

**Acute**

**Dermal**

*Solid*

LD50 Rabbit > 2000 mg/kg bw/day

**Oral**

*Solid*

LD50 Rat > 2000 mg/kg bw/day

HEXAMETHYLENE DIACRYLATE (HDDA) (CAS 13048-33-4)

**Acute**

**Dermal**

LD50 Rabbit 3650 mg/kg, 24 Hours

**Oral**

LD50 Rat > 5000 mg/kg

Nickel, 5,5'-azobis-2,4,6-(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6)

**Acute**

**Inhalation**

LC50 Rat > 5222 mg/m3, 4 hours OECD 403

**Oral**

LD50 Rat > 5000 mg/day OECD 401

Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide (CAS 162881-26-7)

**Acute**

**Dermal**

LD50 Rat > 2000 ml/kg

**Oral**

LD50 Rat > 2000 mg/kg

PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE (CAS 84170-74-1)

**Acute**

**Dermal**

LD50 Rat > 2000 mg/kg, 24 Hours

**Oral**

LD50 Rat > 5000 mg/kg

TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5)

**Acute**

**Oral**

LD50 Rat > 5000 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

**Irritation Corrosion - Skin**

HEXAMETHYLENE DIACRYLATE (HDDA)

OECD 404  
Result: Irritating  
Species: Rabbit

**Irritation Corrosion - Skin**

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 404 Result: Irritating Species: Rat
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 404 Result: Irritating Species: Rat
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 404 Result: Not irritating
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 404 Result: Not irritating
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	OECD 404 Result: Not irritating Species: Rabbit
Ethyl 4-dimethylaminobenzoate	OECD 404 Result: Not irritating Species: Rabbit
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 404 Result: Not irritating Species: Rabbit

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Eye**

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	EU B,5 Result: Not irritating Species: Rabbit
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 405 Result: Irritating Species: Rabbit
2-Isopropyl-9H-thioxanthen-9-one	OECD 405 Result: Not irritating
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 405 Result: Not irritating
Ethyl 4-dimethylaminobenzoate	OECD 405 Result: Not irritating Species: Rabbit
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 405 Result: Not irritating Species: Rabbit
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 405 Result: Irritating

**Irritation Corrosion - Eye**

Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 405 Result: Not irritating
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	OECD405 Result: Irritating

**Maximum group mean score**

2-Isopropyl-9H-thioxanthen-9-one	OECD 404 Result: Not irritating
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 405 Result: Not irritating

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

**Sensitization**

2-Isopropyl-9H-thioxanthen-9-one	OECD 406 Result: Not sensitizing
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**Skin sensitization**

Ethyl 4-dimethylaminobenzoate	OECD 406 Result: Not sensitizing Species: Guinea pig
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 406 Result: Sensitizing Species: Guinea pig
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 406 Result: Sensitizing Species: Guinea pig

**Skin sensitization**

HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 406, GMPT Result: Sensitizing Species: Guinea pig
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	OECD 429 Result: positive Species: Mouse
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 429 Result: Sensitizing Severity: EC3=2,8%
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 429 Result: Sensitizing Severity: EC3=4,6%
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 429, LLNA Result: Not sensitizing
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 429, LLNA Result: Sensitizing Species: Mouse Severity: EC3 = 0,9%
TRIMETHYLOLPROPANE TRIACRYLATE	Result: Sensitizing Species: Human

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Germ cell mutagenicity: Ames test**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 471 Result: Negative
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 471 Result: Negative.
Ethyl 4-dimethylaminobenzoate	OECD 471 Result: Negative.
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 471 Result: Negative.
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 471 Result: Negative.
2-Isopropyl-9H-thioxanthen-9-one	OECD 471 Result: Positive
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	OECD 471 Result: positive
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 471, in vitro Result: Negative
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 471, in vitro Result: Negative

**Germ cell mutagenicity: Chromosome Aberration**

Ethyl 4-dimethylaminobenzoate	0, without metabolic activation.
2-Isopropyl-9H-thioxanthen-9-one	OECD 473 Result: Negative
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 473 Result: Negative
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 473 Result: Negative.
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 473, in vitro Result: Positive
Ethyl 4-dimethylaminobenzoate	OECD 473, with metabolic activation Result: positive

**Germ cell mutagenicity: Micronucleus**

2-Isopropyl-9H-thioxanthen-9-one	OECD 474 Result: Negative
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 474 Result: Negative.
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	OECD 474 Result: Negative.
Ethyl 4-dimethylaminobenzoate	OECD 474 Result: Negative. Species: Mouse



**Germ cell mutagenicity: Micronucleus**

PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 474, (similar product) Result: Negative.
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 474, in vivo Result: Negative
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 487, in vitro Result: Negative

**Mutagenicity**

PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 467 Result: Negative.
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 476 Result: Negative.
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 476 Result: Negative.
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 476 Result: Negative.
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 476, HPRT assay Result: Negative
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 476, in vitro Result: Positive OECD 489, in vivo Result: Negative

**Carcinogenicity**

Suspected of causing cancer. Pigment Yellow 150 is a nickel-containing pigment. Nickel-containing compounds as group are listed by IARC as a Group 1 carcinogen (carcinogenic to humans). It is questionable whether the reference substances the group classification is based upon, are sufficiently representative for PY150. Data regarding the carcinogenic potential of Pigment Yellow 150 is insufficient and inconsistent. Because the data is inconclusive, Pigment Yellow 150 is not classifiable as to its human carcinogenicity under OSHA. In addition, no significant contribution to human cancer risk is to be expected when the OEL is observed.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6)	1 Carcinogenic to humans.
TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5)	2B Possibly carcinogenic to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6)	Known To Be Human Carcinogen.
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**Reproductive toxicity**

May damage fertility or the unborn child.

**Developmental effects**

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 414 Result: Negative. Species: Rat
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD 414 Result: Negative. Species: Rat
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 422 Result: Negative Species: Rat

**Developmental effects - EU category**

2-Isopropyl-9H-thioxanthen-9-one	62.5 mg/kg bw/day Result: NOAEL
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**Fertility - EU category**

2-Isopropyl-9H-thioxanthen-9-one	62.5 mg/kg bw/day Result: NOAEL
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**Fertility effects - Males**

Ethyl 4-dimethylaminobenzoate	OECD 421 Result: positive Species: Rat Organ: Testes
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**Fertility effects - Males and females**

PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 421 Result: Negative.
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**Reproductivity**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	1000 mg/kg bw/day Result: NOAEL Species: Rat
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 421 Result: Negative.
TRIMETHYLOLPROPANE TRIACRYLATE	OECD 422 Result: Negative Species: Rat
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	OECD 422 Result: Negative.
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 422 Result: Negative. Species: Rat
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	OECD 422, (similar product) Result: Negative. Species: Rat
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	OECD414 Result: Negative.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	> 1000 mg/kg bw/day, 28 days oral Result: NOAEL
2-Isopropyl-9H-thioxanthen-9-one	100 mg/kg bw/day OECD 407 Result: LOAEL Test Duration: 28 d
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	OECD 407 Result: Negative. Species: Rat
HEXAMETHYLENE DIACRYLATE (HDDA)	OECD 422 Result: Negative. Species: Rat
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	Result: Negative. Species: Rat Test Duration: 90 d

**Aspiration hazard** Not an aspiration hazard.

<b>12. Ecological information</b>
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**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate (CAS 66492-51-1)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50	Algae 34 mg/l, 72 h
Crustacea	LC50	Daphnia 20 mg/l, 48 h
Fish	LC50	Fish 4 mg/l, 96 h
2-Isopropyl-9H-thioxanthen-9-one (CAS 5495-84-1)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fish 0.125 mg/l, 96 h
2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol] (CAS 1393932-71-2)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fish 1.2 mg/l, 96 h

Components	Species		Test Results
Ethyl 4-dimethylaminobenzoate (CAS 10287-53-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	2.8 mg/l, 72 h
Crustacea	LC50	Daphnia	31.8 mg/l, 48 h
Fish	LC50	Fish	1.9 mg/l, 96 h
HEXAMETHYLENE DIACRYLATE (HDDA) (CAS 13048-33-4)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	1.5 mg/l, 72 h
Crustacea	LC50	Daphnia	2.6 mg/l, 48 h
Fish	LC50	Fish	0.38 mg/l, 96 h
<i>Chronic</i>			
Algae	NOEC	Algae	0.5 mg/l, 21 d
Crustacea	NOEC	Daphnia	0.14 mg/l, 21 d
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	> 100 mg/l, 72 hours
Crustacea	EC50	Daphnia	> 100 mg/l, 48 hours
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide (CAS 162881-26-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	0.26 mg/l, 72 h Supersaturated suspension
Crustacea	LC50	Daphnia	1.1 mg/l, 48 h Supersaturated suspension
Fish	LC50	Fish	> 90 µg/l, 96 h Supersaturated suspension
<i>Chronic</i>			
Crustacea	NOEC	Crustacea	8.1 µg/l, 21 d
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE (CAS 84170-74-1)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	3.4 mg/l, 72 h
Crustacea	LC50	Daphnia	37 mg/l, 48 h
Fish	LC50	Fish	2.7 mg/l, 96 h
TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	> 4.9 - < 14.5 mg/l, 96 h
Crustacea	EC50	Invertebrates (Invertebrates)	19.9 mg/l, 48 h
Fish	LC50	Fish	0.87 mg/l, 96 h
<b>Persistence and degradability</b>			
<b>Biodegradability</b>			
<b>Percent degradation (Aerobic biodegradation)</b>			
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate		OECD 301B	Result: 28
Ethyl 4-dimethylaminobenzoate		OECD 301B, Not readily biodegradable	Result: 40
HEXAMETHYLENE DIACRYLATE (HDDA)		60 - 70 % OECD 310	

## Biodegradability

### Percent degradation (Aerobic biodegradation)

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	OECD 301F Result: 0
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	Result: Inherently biodegradable

## Bioaccumulative potential

### Partition coefficient n-octanol / water (log Kow)

(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	> 1.9
HEXAMETHYLENE DIACRYLATE (HDDA)	2.81, Log Kow
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	5.8
PROPOXYLATED NEOPENTYL GLYCOL DIACRYLATE	2.41 - 3.87, Log Kow
TRIMETHYLOLPROPANE TRIACRYLATE	> 3.3

### Bioconcentration factor (BCF)

2-Propenoic acid, reaction products with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,2-propanediol]	388 % v/w
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	< 5

**Mobility in soil** No data available.

### Adsorption

#### Soil/sediment sorption - log Koc

2-Isopropyl-9H-thioxanthen-9-one	Result: 3,98
Ethyl 4-dimethylaminobenzoate	Result: 2,8
HEXAMETHYLENE DIACRYLATE (HDDA)	2.1
Phenylbis(2,4,6-trimethylbenzoyl) phosphine-oxide	3.85
TRIMETHYLOLPROPANE TRIACRYLATE	2.24

## Mobility in general

### Distribution

#### Octanol/water distribution coefficient log DOW

2-Isopropyl-9H-thioxanthen-9-one	OECD 117 Result: 5,59
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**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

<b>DOT</b>	
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, Trimethylolpropane Triacrylate), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	8, 146, 335, IB3, T4, TP1, TP29

Packaging exceptions 155  
Packaging non bulk 203  
Packaging bulk 241

**IATA**

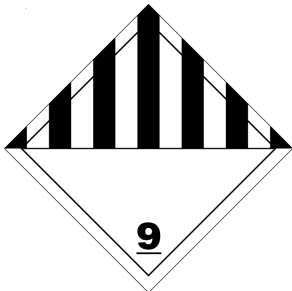
UN number UN3082  
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, Trimethylolpropane Triacrylate)  
Transport hazard class(es)  
Class 9  
Subsidiary risk -  
Packing group III  
Environmental hazards Yes  
ERG Code 9L  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.  
Other information  
Passenger and cargo aircraft Allowed with restrictions.  
Cargo aircraft only Allowed with restrictions.

**IMDG**

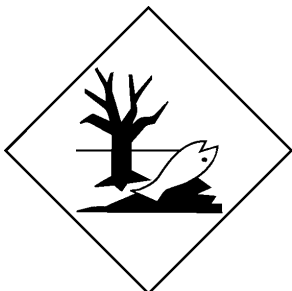
UN number UN3082  
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, Trimethylolpropane Triacrylate), MARINE POLLUTANT  
Transport hazard class(es)  
Class 9  
Subsidiary risk -  
Packing group III  
Environmental hazards  
Marine pollutant Yes  
EmS F-A, S-F  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

**DOT; IATA; IMDG**



**Marine pollutant**



**General information** IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6) Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Skin corrosion or irritation  
Serious eye damage or eye irritation  
Respiratory or skin sensitization  
Carcinogenicity  
Reproductive toxicity

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes	68511-62-6	1 - <2.5

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5)

**California Proposition 65**



**WARNING:** This product can expose you to chemicals including TRIMETHYLOLPROPANE TRIACRYLATE, which is known to the State of California to cause cancer. Not applicable.

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Nickel, 5,5'-azobis-2,4,6(1H,3H,5H)-pyrimidinetrione complexes (CAS 68511-62-6) Listed: May 7, 2004

TRIMETHYLOLPROPANE TRIACRYLATE (CAS 15625-89-5) Listed: December 17, 2021

**16. Other information, including date of preparation or last revision**

**Issue date** 04-11-2019  
**Revision date** 12-08-2023  
**Version #** 6.1

**Disclaimer** The information in this Safety Data Sheet is based on the present state of knowledge and current legislation and is believed to be accurate. It provides guidance on health, safety and environmental aspects of the product and should neither be construed as any guarantee of specific properties nor of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1. This document was prepared to the requirements of the jurisdiction in Section 1 and may not meet regulatory requirements in other countries or territories. The information contained in this safety data sheet does not replace the user's own assessment of workplace risks, as required by applicable health and safety legislation.

**Revision information**

Hazard(s) identification: Prevention  
Hazard(s) identification: Response  
Hazard(s) identification: Supplemental information  
Composition / Information on Ingredients: Disclosure Overrides  
Toxicological information: Acute toxicity  
Toxicological information: Carcinogenicity