

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/24/2023

Reviewed on 08/24/2023



1 Identification

- **Product identifier** Ink jet printing ink
- **Trade name:** **IJC357 UV LED INK**
- **Product Code(s):**
 3010122719 3098C002AA IJC357 UV INK - Cyan 2L
 1070108988 3098C021AA IJC357 UV INK - Cyan 3L
 1070121552 5535C002AA IJC357 UV INK - Cyan 0,8L
- **Relevant identified uses of the substance or mixture and uses advised against**
 The product should not be used for any purpose other than that specified in Section 1
- **Manufacturer/Supplier:**
 Fujifilm Speciality Ink Systems Limited
 Pysons Road, Broadstairs, Kent. CT10 2LE.
 Tel. +44 (0)1843 866668
- **Information department:**
 Canon USA Inc., One Canon Park, Melville, NY, 11747, USA
 1-800-OK-CANON 24Hr. Emergency CHEMTREC 1-800-424-9300
- **Emergency telephone number:** For Chemical emergencies only: 001866 928 0789

2 Hazard(s) identification

- **Classification of the substance or mixture**

Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Sensitization - Skin 1	H317 May cause an allergic skin reaction.
Carcinogenicity 2	H351 Suspected of causing cancer.
Toxic to Reproduction 2	H361 Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Single Exposure 3	H335 May cause respiratory irritation.
Specific Target Organ Toxicity - Repeated Exposure 1	H372 Causes damage to the liver and the respiratory system through prolonged or repeated exposure.
- **Label elements**
- **GHS label elements**
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

	
GHS07	GHS08
- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
 2-Phenoxyethyl Acrylate
 Isobornyl Acrylate
 2H-Azepin-2-one, 1-ethanyhexahydro
 2-phenoxyethanol
 Trimethylolpropane formalacrylate
 Phenol, ethoxylated esters with acrylic acid
 Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-
 Dipentaerythritol penta/hexa acrylate
 trimethylolpropane triacrylate
 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate
- **Hazard statements**
 Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 Suspected of damaging fertility or the unborn child.

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May cause respiratory irritation.
Causes damage to the liver and the respiratory system through prolonged or repeated exposure.

- **Precautionary statements**

Avoid breathing mist/vapours/spray.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
Get medical advice if you feel unwell.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.

- **Classification system**

- **NFPA ratings (scale 0-4)**



Health = 2
Fire = 0
Reactivity = 0

- **HMIS ratings (scale 0-4)**



Health = *2
Fire = 0
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: 48145-04-6 EINECS: 256-360-6	2-Phenoxyethyl Acrylate ----- Toxic to Reproduction 2, H361 Sensitization - Skin 1A, H317	10-30%
CAS: 66492-51-1 EINECS: 266-380-7	Trimethylolpropane formalacrylate ----- Skin Irritation 2, H315; Sensitization - Skin 1, H317	10-30%
CAS: 2235-00-9 EINECS: 218-787-6	2H-Azepin-2-one, 1-ethanyhexahydro ----- Specific Target Organ Toxicity - Repeated Exposure 1, H372 Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Eye Irritation 2A, H319; Sensitization - Skin 1, H317	10-30%
CAS: 5888-33-5 EINECS: 227-561-6	Isobornyl Acrylate ----- Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	10-20%
CAS: 73378-73-1 EC number: 630-550-2	Modified hexafunctional polyester acrylate polymer ----- Eye Irritation 2A, H319	1-5%
CAS: 56641-05-5 NLP: 500-133-9	Phenol, ethoxylated esters with acrylic acid ----- Sensitization - Skin 1, H317	1-5%
CAS: 162881-26-7 ELINCS: 423-340-5	Phosphine oxide, phenylbis(2,4,6- trimethylbenzoyl)- ----- Sensitization - Skin 1, H317	1-5%
CAS: 60506-81-2 EINECS: 262-270-8	Dipentaerythritol penta/hexa acrylate ----- Eye Irritation 2A, H319; Sensitization - Skin 1, H317	1-5%
CAS: 122-99-6 EINECS: 204-589-7	2-phenoxyethanol ----- Eye Damage 1, H318 Acute Toxicity - Oral 4, H302; Specific Target Organ Toxicity - Single Exposure 3, H335	1-5%

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CAS: 15625-89-5 EINECS: 239-701-3	trimethylolpropane triacrylate ----- Carcinogenicity 2, H351 Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317	<1%
CAS: 42978-66-5 EINECS: 256-032-2	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate ----- Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	<1%
CAS: 5495-84-1 EINECS: 226-827-9	2-isopropyl-9H-thioxanthen-9-one ----- Toxic to Reproduction 2, H361	<1%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
- **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.
- **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**
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NOx)
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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).

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Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.

- **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.
- **Protective Action Criteria for Chemicals**

• **PAC-1:**

122-99-6	2-phenoxyethanol	1.5 ppm
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• **PAC-2:**

122-99-6	2-phenoxyethanol	16 ppm
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• **PAC-3:**

122-99-6	2-phenoxyethanol	97 ppm
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7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage** Store in accordance with current national regulations.
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store between 5 - 30°C.
- **Information about storage in one common storage facility:** Not required.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **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.

15625-89-5 trimethylolpropane triacrylate	
WEEL	Long-term value: 1 mg/m ³ Skin

- **Additional information:**
The instructions and information provided by the manufacturer of the personal protective equipment on use, storage, maintenance and replacement must always be followed.
- **Exposure controls**
- **General protective and hygienic measures**
Store protective clothing separately.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Keep away from foodstuffs, beverages and feed.
- **Breathing equipment:**
Provide a good standard of general ventilation (not less than 3 - 5 air changes per hour)
In cases of insufficient ventilation use the following respiratory protective device:
Filter A/P2.
- **Protection of hands:**

| Rubber

| Nitrile

| Neoprene

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Type	Single Use	Multi Use	Heavy Duty (Gauntlets)	Single Use	Multi Use	Heavy Duty (Gauntlets)
Preparation	X	Y	X	X	Y	X
Print Shop						
Solvent Inks	Y	Y	Y	Y	Y	Y
UV Inks	X	X	X	Y	Y	Y
Reclaim	X	X	Y	X	X	Y

Y = recommended X = not recommended

Single use disposable nitrile gloves (short duration exposure of few minutes, or where only splashes likely). Not to be reused when removed.

Minimum 0.4mm thick neoprene or nitrile gloves (longer duration exposure or mechanical handling activities). To be replaced immediately when punctured or degraded.

Heavy duty unlined neoprene gloves (when using solvents). To be replaced immediately when punctured or degraded.

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The selection of single or multi-use gloves is dependent upon the level of exposure.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Always ensure that gloves are free from defects and that they are stored and used correctly.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Hands should be inspected on a regular basis for any signs of skin damage or inflammation

- **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; disposable overalls are preferable.

Acrylates, like any other organic solvent, are skin and/or eye irritants. Since acrylates do not evaporate, they will remain on the skin or clothes for extended periods. This long term exposure, caused by the non volatility, can give rise to dermatitis. It is essential that the measures given above are always followed.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid

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: undetermined

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not applicable.

- **Auto igniting:** Not applicable

- **Decomposition temperature:** Not determined.

- **Ignition temperature:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

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• Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
• Oxidizing properties	Not determined
• Vapor pressure:	Not determined.
• Density at 20 °C (68 °F):	1.08 g/cm ³ (9.0126 lbs/gal)
• Relative density	Not determined.
• Vapor density	Not determined.
• Evaporation rate	Not determined.
• Water:	Not miscible or difficult to mix
• Partition coefficient (n-octanol/ water):	Not determined.
• Viscosity:	Not determined
• dynamic:	Not determined.
• kinematic:	Not determined.
• Solvent content:	
Organic solvents:	0.0 %
• 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.
- **Stable until:** 50°C
- **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:**

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

48145-04-6 2-Phenoxyethyl Acrylate

Dermal	LD50	>2,000 mg/kg (rat)
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2235-00-9 2H-Azepin-2-one, 1-ethanyhexahydro

Oral	LD50	1,860 mg/kg (rat) ((OECD Guideline 401))
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Dermal	LD50	>2,000 mg/kg (rat)
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		1,700 mg/kg (rabbit) (OECD Guideline 402)
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Inhalative	LC50 8h	>1.6 mg/l (rat)
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5888-33-5 Isobornyl Acrylate

Oral	LD50	4,350 mg/kg (rat)
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162881-26-7 Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-

Oral	LD50	>2,000 mg/kg (rat)
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Dermal	LD50	>2,000 mg/kg (rat)
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15625-89-5 trimethylolpropane triacrylate

Oral	LD50	3,680 mg/kg (rat)
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Dermal	LD50	5,170 mg/kg (rabbit)
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42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Oral	LD50	6,800 mg/kg (rat)
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Dermal	LD50	>2,000 mg/kg (rabbit)
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- **Specific symptoms in biological assay:**
- **on the skin:** Irritant to skin and mucous membranes.

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- **on the eye:** 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:
Irritant
No further data

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

66492-51-1 Trimethylolpropane formalacrylate

LC50/96 h | 4 mg/l (Oncorhynchus mykiss)

5888-33-5 Isobornyl Acrylate

LC50/96 h | 0.7 mg/l (Zebra fish) (OECD Test Guideline 203)

EC50/72 h | 1.98 mg/l (algae) (OECD Test Guideline 201, Growth inhibition)

162881-26-7 Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-

LC50/96 h | >0.09 mg/l (Brachydanio rerio)

EC50/48 h | >1.175 mg/l (Daphnia)

EC50/72 h | 0.26 mg/l (algae)

IC50 | >100 mg/l (Sewage sludge)

15625-89-5 trimethylolpropane triacrylate

LC50/96 h | 1-10 mg/l (Daphnia)

EC50/48 h | 10-100 mg/l (Daphnia)

EC50/72 h | 1-10 mg/l (algae)

42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

LC50/96 h | 4.6-10 mg/l (Fish)

- **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:**

There are no data on the preparation itself



Do not allow product to reach ground water, water course or sewage system.

The material is harmful to the environment.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- Waste treatment methods
- Recommendation



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

- Recommendation: Also see Section 16 'Other Information'

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA 	UN3082
<ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR · IMDG · IATA 	Environmentally hazardous substance, liquid, n.o.s. 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acrylate Monomer, Acrylate Monomer) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acrylate Monomer, Acrylate Monomer), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acrylate Monomer, Acrylate Monomer)
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT 	
<ul style="list-style-type: none"> · Class · Label 	9 Miscellaneous dangerous substances and articles 9
<ul style="list-style-type: none"> · ADR, IMDG, IATA 	
<ul style="list-style-type: none"> · Class · Label 	9 Miscellaneous dangerous substances and articles 9
<ul style="list-style-type: none"> · Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: 	Yes Symbol (fish and tree)
<ul style="list-style-type: none"> · Special marking (ADR): · Special marking (IATA): 	Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · Special precautions for user 	Warning: Miscellaneous dangerous substances and articles
<ul style="list-style-type: none"> · Hazard identification number (Kemler code): · EMS Number: 	90 F-A,S-F
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	Single or combination packagings containing a net quantity per single or

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<ul style="list-style-type: none"> · ADR · Excepted quantities (EQ) 	<p>inner packaging of 5lt/5kg or less of UN3082, are not subject to the provisions of ADR (Special Provision 375), IMDG (2.10.2.7) or IATA (special provision 197) by way of a pack size exemption.</p> <p>Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>5L</p> <p>Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ACRYLATE MONOMER, ACRYLATE MONOMER), 9, III</p>

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 ingredients is listed.

- **SARA Section 313 (specific toxic chemical listings)**

48145-04-6	2-Phenoxyethyl Acrylate
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- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Prop 65 - Chemicals known to cause cancer**

15625-89-5	trimethylolpropane triacrylate
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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.

The safety data sheets is in compliance with regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878

A "*" in the left hand margin indicates an amendment from the previous version.

- **Relevant phrases**

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H351 Suspected of causing cancer.
 H361 Suspected of damaging fertility or the unborn child.
 H372 Causes damage to organs through prolonged or repeated exposure.

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• **Recommended restriction of use**

The product should not be used for any purpose other than that specified in Section 1.

• **Department issuing SDS:**

Product Safety Department - Fujifilm Speciality Systems Limited

• **Contact:** *fsis.product-safety@fujifilm.com*

• **Date of preparation / last revision** 08/24/2023

• **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 (IATA Dangerous Goods Regulation (DGR) 64th Edition 2023)

ELINECS: 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)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Toxicity - Oral 4: Acute toxicity - Category 4

Skin Irritation 2: Skin corrosion/irritation - Category 2

Eye Damage 1: Serious eye damage/eye irritation - Category 1

Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1

Sensitization - Skin 1A: Skin sensitisation - Category 1A

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

Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) - Category 1

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