



# Ace of Shades Paint

## SAFETY DATA SHEET

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### SECTION 1. PRODUCT IDENTIFICATION

<b>Product identifier</b>	<b>SD-80 SUPER DUCER SLOW REDUCER</b>	
<b>Other means of identification</b>		
<b>Product code</b>	SD-80	
<b>Recommended use</b>	Reducer	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Ace of Shades Paint, LLC	
<b>Address</b>	985 Meadow Gate RD Meadow Vista, CA 95722 United States	
<b>Telephone</b>	877-223-5385	
<b>Website</b>	www.aceofshadespaint.com	
	EMERGENCY 24 Hrs.	
<b>Emergency phone number</b>	EMERGENCY 24 Hrs.	800-424-9300 ChemTrec

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### SECTION 2. HAZARDS IDENTIFICATION

#### **GHS Classification**

Flammable liquids	: Category 2
Skin irritation	: Category 2
Eye irritation	: Category 2A
Germ cell mutagenicity	: Category 1B
Carcinogenicity	: Category 2
Reproductive toxicity	: Category 2
Specific target organ toxicity - single exposure	: Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure	: Category 2 (Liver, Kidney, Central nervous system, Auditory system)
Specific target organ toxicity - repeated exposure (Inhalation)	: Category 2 (Auditory system, Eyes)

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Aspiration hazard : Category 1

**GHS Label element**

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H340 May cause genetic defects.  
H351 Suspected of causing cancer.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to organs (Liver, Kidney, Central nervous system, Auditory system) through prolonged or repeated exposure.  
H373 May cause damage to organs (Auditory system, Eyes) through prolonged or repeated exposure if inhaled.

Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ eye protection/ face protection.  
P281 Use personal protective equipment as required.  
**Response:**  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

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P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P331 Do NOT induce vomiting.  
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
 P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403 + P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Potential Health Effects**

**Carcinogenicity:**

**IARC**

Group 2B: Possibly carcinogenic to humans

64742-49-0 Naphtha (pet), hydrotreated  
It

64742-89-8 Solvent naphtha (pet), It  
aliph.

100-41-4 Ethylbenzene

**ACGIH**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Emergency Overview**

Appearance	liquid
Colour	clear, colourless
Hazard Summary	No information available.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

CAS-No.	Chemical Name	Concentration (%)
763-69-9	Ethyl 3-ethoxypropionate	30 - 50
123-86-4	n-Butyl acetate	20 - 30
108-88-3	Toluene	5 - 10
78-93-3	Methyl ethyl ketone	5 - 10
64742-49-0	Naphtha (pet), hydrotreated It	0 - 10
64742-89-8	Solvent naphtha (pet), It aliph.	0 - 10
68410-97-9	Distillates, pet, It dist hydrotreat process, low-boil	0 - 10
1330-20-7	Mixed xylenes	1 - 5
100-41-4	Ethylbenzene	1 - 5

**Special Notes:**

: Functionally equivalent petroleum streams may be found in this preparation at varying concentrations. Mixed Xylenes contains the isomers o-, m-, p- Xylene, and Ethylbenzene. Trace amounts of Toluene and Benzene may also be present as impurities.

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**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Symptoms of poisoning may appear several hours later.  
Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.

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	If unconscious place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

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## SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Use a water spray to cool fully closed containers.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments.
Special protective equip-	: Wear self-contained breathing apparatus for fire-

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ment for firefighters                      fighting if necessary.

**NFPA Flammable and Combustible Liquids Classification:**  
Flammable Liquid Class IB

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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|---|---|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment.<br>Ensure adequate ventilation.<br>Remove all sources of ignition.<br>Evacuate personnel to safe areas.<br>Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. |
| Environmental precautions   | : Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities.   |
| Methods and materials for containment and cleaning up               | : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).                     |

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**SECTION 7. HANDLING AND STORAGE**

- |                             |   |
|-----------------------------|---|
| Advice on safe handling     | : Avoid formation of aerosol.<br>Do not breathe vapours/dust.<br>Avoid exposure - obtain special instructions before use.<br>Avoid contact with skin and eyes.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Take precautionary measures against static discharges.<br>Provide sufficient air exchange and/or exhaust in work rooms.<br>Open drum carefully as content may be under pressure.<br>Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | : No smoking.<br>Keep container tightly closed in a dry and well-ventilated place.  |
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Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Observe label precautions.  
 Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
123-86-4	n-Butyl acetate	TWA	150 ppm	ACGIH
		STEL	200 ppm	ACGIH
		ST	200 ppm 950 mg/m <sup>3</sup>	NIOSH REL
		TWA	150 ppm 710 mg/m <sup>3</sup>	NIOSH REL
		TWA	150 ppm 710 mg/m <sup>3</sup>	OSHA Z-1
		TWA	150 ppm 710 mg/m <sup>3</sup>	OSHA P0
		STEL	200 ppm 950 mg/m <sup>3</sup>	OSHA P0
108-88-3	Toluene	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m <sup>3</sup>	NIOSH REL
		ST	150 ppm 560 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm 375 mg/m <sup>3</sup>	OSHA P0
78-93-3	Methyl ethyl ketone	STEL	150 ppm 560 mg/m <sup>3</sup>	OSHA P0
		TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m <sup>3</sup>	NIOSH REL
		ST	300 ppm 885 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm 590 mg/m <sup>3</sup>	OSHA Z-1
		TWA	200 ppm	OSHA P0

			590 mg/m <sup>3</sup>	
		STEL	300 ppm 885 mg/m <sup>3</sup>	OSHA P0
64742-49-0	Naphtha (pet), hydrotreated It	TWA	500 ppm 2,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm 1,600 mg/m <sup>3</sup>	OSHA P0
64742-89-8	Solvent naphtha (pet), It aliph.	TWA	500 ppm 2,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm 1,600 mg/m <sup>3</sup>	OSHA P0
1330-20-7	Mixed xylenes	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		TWA	100 ppm 435 mg/m <sup>3</sup>	OSHA Z-1
100-41-4	Ethylbenzene	TWA	20 ppm	ACGIH
		STEL	125 ppm	ACGIH
		TWA	100 ppm 435 mg/m <sup>3</sup>	NIOSH REL
		ST	125 ppm 545 mg/m <sup>3</sup>	NIOSH REL
		TWA	100 ppm 435 mg/m <sup>3</sup>	OSHA Z-1
		TWA	100 ppm 435 mg/m <sup>3</sup>	OSHA P0
		STEL	125 ppm 545 mg/m <sup>3</sup>	OSHA P0

### Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Toluene	108-88-3	Toluene	In blood	Prior to last shift of work-week	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As	0.3 mg/g Creatinine	ACGIH BEI



				soon as possible after exposure ceases)		
Methyl ethyl ketone	78-93-3	MEK	In urine	End of shift (As soon as possible after exposure ceases)	2 mg/l	ACGIH BEI
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift at end of work-week	0.7 g/g creatinine	ACGIH BEI

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.  
In the case of vapour formation use a respirator with an approved filter.

Hand protection  
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance	: liquid
Colour	: clear, colourless
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
Freezing Point	: No data available
Boiling Point (Boiling point/boiling range)	: 56 - 140 °C (133 - 284 °F) (1013 hPa)
Flash point	: -4 °C (25 °F)
Evaporation rate	: 1 Ethyl Ether
Flammability (solid, gas)	: No data available
Burning rate	: No data available
Upper explosion limit	: 10 %(V) Calculated Explosive Limit
Lower explosion limit	: 1 %(V) Calculated Explosive Limit
Vapour pressure	: 170.02 mmHg @ 20 °C (68 °F) Calculated Vapor Pressure
Relative vapour density	: > 1(Air = 1.0)
Relative density	: 0.89 @ 20 °C (68 °F)
Density	: 0.89 g/cm <sup>3</sup> @ 20 °C (68 °F) 7.4235 lb/gal @ 20 °C (68 °F)
Bulk density	: No data available
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available

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Thermal decomposition : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization. Vapours may form explosive mixture with air.

Conditions to avoid : Keep away from heat, flame, sparks and other ignition sources.  
Extremes of temperature and direct sunlight.  
Exposure to light.

Incompatible materials : Acids  
alkalis  
Amines  
Copper  
Copper alloys  
nitrates  
organic absorbents such as sawdust, peat moss, ground corn cobs, etc.  
Strong oxidizing agents  
Strong reducing agents  
Bases  
halogens  
metal salts  
Peroxides

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### **Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 30000 ppm  
Exposure time: 4 h  
Test atmosphere: gas

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Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**Components:**

**763-69-9:**

Acute oral toxicity : LD50 (rat, male): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute inhalation toxicity : LC50 (rat): > 998 ppm  
Exposure time: 6 h  
Method: OECD Test Guideline 403  
Symptoms: weight gain  
GLP: No data available  
Assessment: The component/mixture is low toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit, male): 4,080 mg/kg  
Method: OECD Test Guideline 402  
Symptoms: no symptoms  
GLP: no

**123-86-4:**

Acute oral toxicity : LD50 (rat): > 5,000 mg/kg  
Method: OECD Test Guideline 423  
GLP: no

Acute inhalation toxicity : LC50 (rat, male and female): > 21 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: OECD Test Guideline 403  
GLP: yes

Acute dermal toxicity : LD50 (rabbit, male and female): > 5,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

**108-88-3:**

Acute oral toxicity : LD50 (rat, male): > 5,580 mg/kg

Acute inhalation toxicity : LC50 (rat, male and female): 28.1 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (rabbit): > 5,000 mg/kg

**78-93-3:**

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Acute oral toxicity	: LD50 (rat): 2,737 mg/kg
Acute inhalation toxicity	: LC50 (mouse): 320 mg/l Exposure time: 4 h
Acute dermal toxicity	: LD50 (rabbit): 6,480 mg/kg
<b>64742-49-0:</b>	
Acute oral toxicity	: LD50 (rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (rabbit, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
<b>64742-89-8:</b>	
Acute oral toxicity	: LD50 (rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (rabbit, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
<b>68410-97-9:</b>	
Acute oral toxicity	: LD50 (rat): > 5,000 mg/kg
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (rabbit): > 2,000 mg/kg
<b>1330-20-7:</b>	
Acute oral toxicity	: LD50 (rat, male): 3,523 mg/kg Method: EU Method B.1 (Acute Toxicity, Oral) GLP: no
Acute inhalation toxicity	: LC50 (rat, male): 6700 ppm Exposure time: 4 h Method: Directive 67/548/EEC, Annex V, B.2. Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	: LD50 (rabbit): 1,100 mg/kg Assessment: The component/mixture is moderately toxic after single contact with skin.

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**100-41-4:**

Acute inhalation toxicity : LC50 (Mouse, Male): 10 mg/l  
Exposure time: 4 h  
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit): 15,433 mg/kg

**Skin corrosion/irritation**

**Product:**

Remarks: Irritating to skin.

**Components:**

**763-69-9:**

Species: rabbit  
Exposure time: 4 h  
Method: OECD Test Guideline 404  
Result: Mild skin irritation  
GLP: no

**123-86-4:**

Species: rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: no

**108-88-3:**

Species: rabbit  
Exposure time: 4 h  
Result: Irritating to skin.

**78-93-3:**

Species: rabbit  
Exposure time: 24 h  
Result: No skin irritation

**64742-49-0:**

Species: rabbit  
Result: Irritating to skin.

**64742-89-8:**

Species: rabbit  
Exposure time: 4 h  
Result: Irritating to skin.

**68410-97-9:**

Species: rabbit  
Result: Irritating to skin.

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**1330-20-7:**

Species: rabbit  
Exposure time: 24 h  
Result: Irritating to skin.

**100-41-4:**

Species: rabbit  
Result: Mild skin irritation

**Serious eye damage/eye irritation**

**Product:**

Remarks: Irritating to eyes.

**Components:**

**763-69-9:**

Species: rabbit  
Result: Mild eye irritation  
Method: OECD Test Guideline 405  
GLP: no

**123-86-4:**

Species: rabbit  
Result: No eye irritation  
GLP: yes

**108-88-3:**

Species: rabbit  
Result: Irritating to eyes.  
Method: OECD Test Guideline 405

**78-93-3:**

Species: rabbit  
Result: Irritating to eyes.  
Exposure time: 24 h

**64742-49-0:**

Species: rabbit  
Result: Irritating to eyes.

**64742-89-8:**

Species: rabbit  
Result: Irritating to eyes.

**68410-97-9:**

Species: rabbit  
Result: Irritating to eyes.

**1330-20-7:**

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Species: rabbit  
Result: Irritating to eyes.

**100-41-4:**

Species: rabbit  
Result: Mild eye irritation

**Respiratory or skin sensitisation**

**Components:**

**763-69-9:**

Species: guinea pig  
Method: OECD Test Guideline 406  
Result: Did not cause sensitisation on laboratory animals.

**123-86-4:**

Species: guinea pig  
Result: Did not cause sensitisation on laboratory animals.

**108-88-3:**

Test Type: Maximisation Test (GPMT)  
Species: guinea pig  
Result: Did not cause sensitisation on laboratory animals.  
GLP: yes

**78-93-3:**

Test Type: Buehler Test  
Species: guinea pig  
Method: OECD Test Guideline 406  
Result: Did not cause sensitisation on laboratory animals.

**64742-49-0:**

Test Type: Buehler Test  
Species: guinea pig  
Result: Did not cause sensitisation on laboratory animals.

**64742-89-8:**

Test Type: Buehler Test  
Species: guinea pig  
Result: Did not cause sensitisation on laboratory animals.

**1330-20-7:**

Remarks: No data available

**100-41-4:**

Remarks: No data available

**Germ cell mutagenicity**

**Components:**

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**763-69-9:**

Genotoxicity in vitro

: Test Type: Mammalian cell gene mutation assay  
Test species: Chinese hamster ovary (CHO)  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative  
GLP: yes

: Test Type: Ames test  
Test species: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative  
GLP: yes

: Test Type: Chromosome aberration test in vitro  
Test species: Chinese hamster ovary (CHO)  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative  
GLP: yes

Germ cell mutagenicity-  
Assessment

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**123-86-4:**

Genotoxicity in vitro

: Test Type: Chromosome aberration test in vitro  
Test species: Chinese hamster lung fibroblasts  
Metabolic activation: Without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative  
GLP: No data available

Genotoxicity in vivo

: Test Type: In vivo micronucleus test  
Test species: mouse (male and female)  
Application Route: Oral  
Dose: 500, 1000, 2000 mg/kg bw  
Method: OECD Test Guideline 474  
Result: negative  
GLP: yes  
Test substance: Information given is based on data obtained from similar substances.

Germ cell mutagenicity-  
Assessment

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**108-88-3:**

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Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay  
Test species: Mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

Genotoxicity in vivo : Test Type: Dominant lethal assay  
Test species: mouse (male)  
Application Route: inhalation (vapour)  
Exposure time: 6 h/d, 5 d/wk for 8 wks  
Dose: 0, 100, 400 ppm  
Method: OECD Test Guideline 478  
Result: negative

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**78-93-3:**

Genotoxicity in vitro : Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

: Test Type: Mammalian cell gene mutation assay  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

: Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Test species: mouse (male and female)  
Dose: 1.96 mL/kg  
Method: OECD Test Guideline 474  
Result: negative

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**64742-49-0:**

Germ cell mutagenicity-Assessment : Mutagenicity classification not possible from current data

**64742-89-8:**

Germ cell mutagenicity- : Mutagenicity classification not possible from current

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Assessment	data
<b>68410-97-9:</b>	
Genotoxicity in vitro	: Test Type: Mammalian cell gene mutation assay Test species: mouse lymphoma cells Result: positive
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse Method: OECD Test Guideline 474 Result: positive
Germ cell mutagenicity- Assessment	: Positive result(s) from in vivo heritable germ cell mu- tagenicity tests in mammals
<b>1330-20-7:</b>	
Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Method: Mutagenicity (in vitro mammalian cytogenetic test) Result: negative
	: Test Type: Sister chromatid exchange assay in mam- malian cells Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Result: negative
Genotoxicity in vivo	: Test Type: Dominant lethal assay Test species: mouse Application Route: Subcutaneous Exposure time: 8 wk Dose: 1.0 mL/kg Method: OECD Test Guideline 478 Result: negative GLP: no
Germ cell mutagenicity- Assessment	: Animal testing did not show any mutagenic effects.
<b>100-41-4:</b>	
Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 473 Result: negative

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GLP: no

: Test Type: Mammalian cell gene mutation assay  
Test species: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative  
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Test species: mouse (male)  
Application Route: Oral  
Method: OECD Test Guideline 474  
Result: negative  
GLP: yes

Test Type: DNA damage and/or repair  
Test species: mouse (male and female)  
Application Route: Inhalation  
Method: OECD Test Guideline 486  
Result: negative  
GLP: yes

Germ cell mutagenicity-Assessment : In vivo tests did not show mutagenic effects

## **Carcinogenicity**

### **Components:**

#### **763-69-9:**

Remarks: This information is not available.

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

#### **123-86-4:**

Remarks: This information is not available.

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

#### **108-88-3:**

Species: rat, (male and female)  
Application Route: inhalation (vapour)  
Exposure time: 103 wks  
Dose: 0, 600, 1200 ppm  
Frequency of Treatment: 6.5 h/d, 5 d/wk  
NOAEL: No observed adverse effect level: 1,200 ppm

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Method: OECD Test Guideline 453  
Result: did not display carcinogenic properties  
Symptoms: Erosion of nasal epithelium  
GLP: yes

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**78-93-3:**

Remarks: This information is not available.

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**64742-49-0:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**64742-89-8:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**68410-97-9:**

Species: mouse  
NOAEL: 50 mg/kg bw/day

Method: OECD Test Guideline 451  
Result: evidence of carcinogenic activity

Carcinogenicity - Assessment : Possible human carcinogen

**1330-20-7:**

Species: mouse, (male and female)  
Application Route: Oral  
Exposure time: 103 wk  
Dose: 0, 500 or 1000 mg/kg  
Frequency of Treatment: 5 days/week  
Method: Directive 67/548/EEC, Annex V, B.32.  
Result: did not display carcinogenic properties  
GLP: No data available

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

**100-41-4:**

Species: mouse, (male and female)  
Application Route: Inhalation  
Exposure time: 103 wk  
Activity duration: 6 h

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Dose: 0, 75, 250, 750 ppm  
Frequency of Treatment: 5 days/week  
NOAEL: 250 ppm

Method: OECD Test Guideline 453  
Result: evidence of carcinogenic activity  
Symptoms: increased incidences of alveolar/bronchiolar neoplasms, increase incidence of hepatocellular carcinomas  
GLP: yes

Carcinogenicity - Assessment : Suspected human carcinogens

### **Reproductive toxicity**

#### **Components:**

##### **763-69-9:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Species: rat  
Application Route: Inhalation  
Dose: 125, 250, 500 and 1000 ppm  
Duration of Single Treatment: 10 d  
General Toxicity Maternal: NOAEC: 250 ppm  
Teratogenicity: NOAEC: 1,000 ppm  
Embryo-foetal toxicity.: NOAEC: 500 ppm  
Method: OECD Test Guideline 414  
Result: No teratogenic effects.  
GLP: No data available

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.

##### **123-86-4:**

Effects on fertility : Species: rat, male and female  
Application Route: Inhalation  
Dose: 0, 750, 1500, 2000 ppm  
Duration of Single Treatment: 6 h  
Frequency of Treatment: 7 days/week  
General Toxicity - Parent: NOAEC: 750 ppm  
General Toxicity F1: NOAEC: 750 ppm  
Fertility: NOAEC: 2,000 ppm  
Early Embryonic Development: NOAEC: 750 ppm  
Symptoms: Effect on reproduction capacity.  
Method: OECD Test Guideline 416  
GLP: yes

Effects on foetal development : Species: rat, male and female  
Application Route: vapour

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Dose: 500, 1500, 3000 ppm  
Duration of Single Treatment: 6 h  
Frequency of Treatment: 5 days/week  
GLP: yes

Reproductive toxicity - Assessment : Fertility classification not possible from current data.  
Embryotoxicity classification not possible from current data.

**108-88-3:**

Effects on fertility : Test Type: Two-generation study  
Species: rat, male and female  
Application Route: Inhalation  
Dose: 0, 100, 500, 2000 ppm  
Frequency of Treatment: 7 days/week  
General Toxicity - Parent: NOAEC: 500 ppm  
General Toxicity F1: NOAEC: 500 ppm  
Fertility: NOAEC: 2,000 ppm  
Symptoms: Reduced maternal body weight gain. Reduced offspring weight gain.  
Method: OECD Test Guideline 416  
Result: Animal testing did not show any effects on fertility.  
GLP: yes

Test Type: Fertility  
Species: rat, male and female  
Application Route: inhalation (vapour)  
Dose: 0, 600, 1200 ppm  
Frequency of Treatment: 7 days/week  
General Toxicity - Parent: NOAEC: 600 ppm  
Symptoms: Decreased sperm count  
Result: Animal testing did not show any effects on fertility.

Effects on foetal development : Species: rat  
Application Route: inhalation (vapour)  
Dose: 0, 250, 750, 1500, 3000 ppm  
Duration of Single Treatment: 10 d  
Frequency of Treatment: 6 hr/day  
General Toxicity Maternal: NOAEC: 750 ppm  
Developmental Toxicity: NOAEC: 750 ppm  
Symptoms: Maternal toxicity, Reduced body weight, Skeletal malformations.  
GLP: yes

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

**78-93-3:**

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Effects on foetal development	: Species: rat, female Application Route: Inhalation Dose: 400, 1000, 3000 ppm Duration of Single Treatment: 18 d Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEC: 1,002 ppm Teratogenicity: NOAEC: 1,002 ppm Method: OECD Test Guideline 414 GLP: no
Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Did not show teratogenic effects in animal experiments.
<b>64742-49-0:</b> Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>64742-89-8:</b> Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>68410-97-9:</b> Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>1330-20-7:</b> Effects on fertility	: Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 25, 100 and 500 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: > 500 ppm General Toxicity F1: NOAEC: > 500 ppm Early Embryonic Development: NOAEC: > 500 ppm Result: No reproductive effects.
Effects on foetal development	: Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000 or 2000 ppm Duration of Single Treatment: 14 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: > 2,000 Developmental Toxicity: NOAEC: 100 ppm Result: No teratogenic effects., Developmental toxicity

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occurred at maternal toxicity dose levels

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility. Damage to fetus not classifiable

**100-41-4:**

Effects on fertility : Test Type: One generation study  
Species: rat, male and female  
Application Route: Inhalation  
Dose: 0, 100, 500 and 1000 ppm  
Duration of Single Treatment: 6 h  
General Toxicity - Parent: NOAEC: 1,000 ppm  
General Toxicity F1: NOAEC: 100 ppm  
Symptoms: Reduced foetal weight. Reduced offspring weight gain.  
Method: OECD Test Guideline 415  
Result: No reproductive effects.  
GLP: yes

Effects on foetal development : Species: rat  
Application Route: Inhalation  
Dose: 0, 100, 500, 1000, 2000 ppm  
Duration of Single Treatment: 15 d  
General Toxicity Maternal: NOAEC: 500 ppm  
Teratogenicity: NOAEC: 2,000 ppm  
Developmental Toxicity: NOAEC: 500 ppm  
Symptoms: Reduced body weight  
Method: OECD Test Guideline 414  
Result: Developmental toxicity occurred at maternal toxicity dose levels  
GLP: No data available

Reproductive toxicity - Assessment : Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.

**STOT - single exposure**

**Product:**No data available

**Components:**

763-69-9:No data available

123-86-4:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin-	

		gle exposure, category 3 with narcotic effects.	
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108-88-3:

<b>Exposure routes:</b>	<b>Target Organs:</b>	<b>Assessment:</b>	<b>Remarks:</b>
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

78-93-3:

<b>Exposure routes:</b>	<b>Target Organs:</b>	<b>Assessment:</b>	<b>Remarks:</b>
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

64742-49-0:

<b>Exposure routes:</b>	<b>Target Organs:</b>	<b>Assessment:</b>	<b>Remarks:</b>
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

64742-89-8:No data available

68410-97-9:

<b>Exposure routes:</b>	<b>Target Organs:</b>	<b>Assessment:</b>	<b>Remarks:</b>
Inhalation	Central nervous system	May cause drowsiness or dizziness.,	

		The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	
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1330-20-7:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Respiratory system	May cause respiratory irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.	

100-41-4:No data available

**STOT - repeated exposure**

**Product:**No data available

**Components:**

**763-69-9:**No data available

**123-86-4:**No data available

**108-88-3:**

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Auditory system, Eyes	May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.	

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**78-93-3:**No data available

**64742-49-0:**No data available

**64742-89-8:**No data available

**68410-97-9:**No data available

**1330-20-7:**

<b>Exposure routes:</b>	<b>Target Organs:</b>	<b>Assessment:</b>	<b>Remarks:</b>
	Liver, Kidney, Central nervous system	May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.	

**100-41-4:**

<b>Exposure routes:</b>	<b>Target Organs:</b>	<b>Assessment:</b>	<b>Remarks:</b>
	Auditory system	May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.	

**Repeated dose toxicity**

**Components:**

**763-69-9:**

Species: rat, male and female

NOAEL: 1,000 mg/kg

Application Route: Oral

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Exposure time: 28 d  
Dose: 100 or 1000 mg/kg/day  
Method: OECD Test Guideline 407  
GLP: yes

Species: rat, male and female  
NOAEL: 500  
Application Route: Inhalation  
Exposure time: 13 wk  
Number of exposures: 6 h/d, 5 d/wk  
Dose: 250, 500 or 1000 ppm

**123-86-4:**

Species: rat, male and female  
NOAEL: 500  
Application Route: inhalation (vapour)  
Exposure time: 13 wk  
Number of exposures: 6 h/d, 5d/wk  
Dose: 500, 1500, 3000 ppm  
GLP: yes  
Symptoms: oral or nasal discharge

**108-88-3:**

Species: rat, male and female  
NOAEL: 300  
Application Route: inhalation (vapour)  
Exposure time: 6, 12, or 18 mths  
Number of exposures: 6 h/d, 5 d/wk  
Dose: 0, 30, 100, 300 ppm  
Method: OECD Test Guideline 453

Repeated dose toxicity - : Causes skin irritation.  
Assessment

**64742-89-8:**

Species: rat, male and female  
NOAEL: 1402  
Application Route: inhalation (vapour)  
Test atmosphere: vapour  
Exposure time: 13 weeks  
Number of exposures: 6 hours/day, 5 days/week  
Dose: 322, 1402, 9869 mg/m<sup>3</sup>  
GLP: yes  
Target Organs: Kidney  
Symptoms: Nasal and ocular discharge

**1330-20-7:**

Species: rat, male and female  
NOAEL: 250 mg/kg  
Application Route: Oral

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Exposure time: 103 wk  
Number of exposures: 5 d/wk  
Dose: 0, 250 or 500 mg/kg  
Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**100-41-4:**

Species: rat, male and female  
NOAEL: 75 mg/kg  
Application Route: Oral  
Exposure time: 28 d  
Dose: 75, 250 and 750 mg/kg bw/day  
Method: OECD Test Guideline 407  
GLP: yes  
Symptoms: Increased kidney and liver weights

**Aspiration toxicity**

**Components:**

**108-88-3:**

Aspiration Toxicity - Category 1

**64742-49-0:**

May be fatal if swallowed and enters airways.

**64742-89-8:**

May be fatal if swallowed and enters airways.

**68410-97-9:**

May be fatal if swallowed and enters airways.

**1330-20-7:**

May be fatal if swallowed and enters airways.

**100-41-4:**

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **763-69-9:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 55.3 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 479.7 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 114.86 mg/l  
End point: Growth rate  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes
- Toxicity to bacteria : IC50: > 5,000 mg/l  
Exposure time: 16 h  
Test Type: Growth inhibition  
GLP:

##### **123-86-4:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 18 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
Method: OECD Test Guideline 203  
GLP: no
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 44 mg/l  
Exposure time: 48 h  
Test Type: static test
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l  
End point: Growth rate  
Exposure time: 72 h
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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 23 mg/l  
Exposure time: 21 d

Toxicity to bacteria : EC 50 (*Tetrahymena pyriformis* (Ciliate)): 356 mg/l  
Exposure time: 40 h  
Test Type: Static

Ecotoxicology Assessment  
Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

**108-88-3:**

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 5.5 mg/l  
Exposure time: 96 h  
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Ceriodaphnia dubia*): 3.78 mg/l  
Exposure time: 48 h  
Test Type: Renewal

Toxicity to algae : EC50 (*Chlorella vulgaris* (Fresh water algae)): 134 mg/l  
Exposure time: 3 h  
Test Type: static test

Toxicity to bacteria : IC50 (Bacteria): 84 mg/l  
Exposure time: 24 h  
Test Type: Static

Ecotoxicology Assessment  
Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**78-93-3:**

Toxicity to fish : LC50 (*Pimephales promelas* (fathead minnow)): > 100 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Test Type: Immobilization

Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (green algae)): > 100 mg/l  
Exposure time: 72 h

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**64742-49-0:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.5 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 3.71 mg/l  
Exposure time: 96 h

Ecotoxicology Assessment  
Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**64742-89-8:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 8.2 mg/l  
Exposure time: 96 h  
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.5 mg/l  
Exposure time: 48 h  
Test Type: Immobilization  
Analytical monitoring: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 3.7 mg/l  
Exposure time: 96 h  
Test Type: static test

Ecotoxicology Assessment  
Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**68410-97-9:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 8.2 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.5 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 3.1 mg/l  
Exposure time: 72 h

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Method: OECD Test Guideline 201

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**1330-20-7:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.6 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1 mg/l  
Exposure time: 24 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata): 4.36 mg/l  
End point: Growth rate  
Exposure time: 73 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**100-41-4:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l  
Exposure time: 96 h  
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.8 mg/l  
Exposure time: 48 h  
Test Type: static test

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata): 5.4 mg/l  
Exposure time: 72 h  
Test Type: static test

Toxicity to bacteria : Remarks: No data available

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

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Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

### **Persistence and degradability**

#### **Components:**

##### **763-69-9:**

Biodegradability : Primary biodegradation  
Inoculum: activated sludge  
Concentration: 34.8 mg/l  
Result: Readily biodegradable.  
Biodegradation: 99.8 %  
Testing period: 5 d  
Exposure time: 28 d  
Method: OECD Test Guideline 301B  
Remarks: The 10 day time window criterion is not fulfilled.

Chemical Oxygen Demand (COD) : 0.002 mg/g

Theoretical Oxygen Demand (ThOD) : 0.00197 mg/g

##### **123-86-4:**

Biodegradability : Biodegradation: 83 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

Chemical Oxygen Demand (COD) : 0.00169 mg/g

BOD/COD : BOD/COD: 72 %

Theoretical Oxygen Demand (ThOD) : 0.0022 mg/g

##### **108-88-3:**

Biodegradability : Inoculum: Sewage  
Biodegradation: 100 %  
Remarks: Readily biodegradable

##### **78-93-3:**

Biodegradability : Concentration: 2 mg/l  
Result: Readily biodegradable.  
Biodegradation: 98 %  
Exposure time: 28 d  
Test substance: Methyl ethyl Ketone  
GLP: yes  
Remarks: Readily biodegradable

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**64742-49-0:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Concentration: 20 mg/l  
Biodegradation: 74.30 %  
Exposure time: 56 d  
GLP: yes  
Remarks: Inherently biodegradable.

**64742-89-8:**

Biodegradability : Concentration: 49.2 mg/l  
Result: Readily biodegradable.  
Biodegradation: 77 %  
Testing period: 2 d  
Exposure time: 28 d  
GLP: yes

**1330-20-7:**

Biodegradability : Inoculum: activated sludge  
Result: Readily biodegradable.  
Biodegradation: 72 %  
Exposure time: 20 d

**100-41-4:**

Biodegradability : Inoculum: activated sludge  
Concentration: 22 mg/l  
Result: Readily biodegradable.  
Biodegradation: 70 %  
Exposure time: 28 d  
GLP: yes

**Bioaccumulative potential**

**Components:**

**763-69-9:**

Partition coefficient: n-octanol/water : log Pow: 1.35

**123-86-4:**

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 15

Partition coefficient: n-octanol/water : log Pow: 1.82

**108-88-3:**

Partition coefficient: n-octanol/water : log Pow: 2.73

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**64742-49-0:**

Partition coefficient: n-octanol/water : Remarks: No data available

**64742-89-8:**

Partition coefficient: n-octanol/water : log Pow: 2.13 - 4.85 (25 °C)

**1330-20-7:**

Partition coefficient: n-octanol/water : log Pow: 2.77 - 3.15

**100-41-4:**

Partition coefficient: n-octanol/water : log Pow: 2.92

**Mobility in soil**

No data available

**Other adverse effects****Product:**

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

**Components:****100-41-4:**

Results of PBT and vPvB assessment

: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues

: Dispose of in accordance with all applicable local, state and federal regulations.

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Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

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## SECTION 14. TRANSPORT INFORMATION

**IATA (International Air Transport Association):** UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-4 °C(25 °F)

**IMDG (International Maritime Dangerous Goods):** UN1263, PAINT RELATED MATERIAL, 3, II

**DOT (Department of Transportation):** UN1263, PAINT RELATED MATERIAL, 3, II

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## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : Flammable liquid, Carcinogen, Harmful by skin absorption., Moderate skin irritant, Moderate eye irritant, Moderate respiratory irritant, Teratogen, Reproductive hazard, Mutagen, Aspiration hazard

**WHMIS Classification** : B2: Flammable liquid  
D1A: Very Toxic Material Causing Immediate and Serious Toxic Effects  
D2A: Very Toxic Material Causing Other Toxic Effects  
D2B: Toxic Material Causing Other Toxic Effects

### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Mixed xylenes	1330-20-7	100	2054

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

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**SARA 311/312  
Hazards**

: Fire Hazard  
Chronic Health Hazard  
Acute Health Hazard

**Clean Air Act**

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

108-88-3	Toluene	8.7920 %
100-41-4	Ethylbenzene	1.4728 %
71-43-2	Benzene	0.0146 %
50-00-0	Formaldehyde	0.0085 %
110-54-3	Hexane	0.0011 %
140-88-5	Ethyl acrylate	0.0006 %
91-20-3	Naphthalene	0.0001 %
98-82-8	Cumene	0.000 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

50-00-0	Formaldehyde	0.0085 %
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The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC's (40 CFR 60.489):

123-86-4	n-Butyl acetate	29.7322 %
108-88-3	Toluene	8.7920 %
78-93-3	Methyl ethyl ketone	8.143 %
1330-20-7	Mixed xylenes	4.8685 %
100-41-4	Ethylbenzene	1.4728 %
110-82-7	Cyclohexane	0.1453 %
71-43-2	Benzene	0.0146 %
50-00-0	Formaldehyde	0.0085 %
140-88-5	Ethyl acrylate	0.0006 %
98-82-8	Cumene	0.000 %

**Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

123-86-4	n-Butyl acetate	29.7322 %
108-88-3	Toluene	8.7920 %
1330-20-7	Mixed xylenes	4.8685 %
100-41-4	Ethylbenzene	1.4728 %
110-82-7	Cyclohexane	0.1453 %
71-43-2	Benzene	0.0146 %
50-00-0	Formaldehyde	0.0085 %
91-20-3	Naphthalene	0.0001 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

123-86-4	n-Butyl acetate	29.7322 %
108-88-3	Toluene	8.7920 %
1330-20-7	Mixed xylenes	4.8685 %
100-41-4	Ethylbenzene	1.4728 %
110-82-7	Cyclohexane	0.1453 %

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71-43-2	Benzene	0.0146 %
50-00-0	Formaldehyde	0.0085 %
91-20-3	Naphthalene	0.0001 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

108-88-3	Toluene	8.7920 %
100-41-4	Ethylbenzene	1.4728 %

### US State Regulations

#### Massachusetts Right To Know

123-86-4	n-Butyl acetate	20 - 30 %
108-88-3	Toluene	5 - 10 %
78-93-3	Methyl ethyl ketone	5 - 10 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	Ethylbenzene	1 - 5 %
71-43-2	Benzene	0 - 0.1 %
50-00-0	Formaldehyde	0 - 0.1 %
140-88-5	Ethyl acrylate	0 - 0.1 %

#### Pennsylvania Right To Know

763-69-9	Ethyl 3-ethoxypropionate	30 - 50 %
123-86-4	n-Butyl acetate	20 - 30 %
108-88-3	Toluene	5 - 10 %
78-93-3	Methyl ethyl ketone	5 - 10 %
64742-49-0	Naphtha (pet), hydrotreated It	0 - 10 %
64742-89-8	Solvent naphtha (pet), It aliph.	0 - 10 %
68410-97-9	Distillates, pet, It dist hydrotreat process, low-boil	0 - 10 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	Ethylbenzene	1 - 5 %
110-82-7	Cyclohexane	0.1 - 1 %
71-43-2	Benzene	0 - 0.1 %

#### New Jersey Right To Know

763-69-9	Ethyl 3-ethoxypropionate	30 - 50 %
123-86-4	n-Butyl acetate	20 - 30 %
108-88-3	Toluene	5 - 10 %
78-93-3	Methyl ethyl ketone	5 - 10 %
64742-49-0	Naphtha (pet), hydrotreated It	0 - 10 %
64742-89-8	Solvent naphtha (pet), It aliph.	0 - 10 %
68410-97-9	Distillates, pet, It dist hydrotreat process, low-boil	0 - 10 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	Ethylbenzene	1 - 5 %

#### California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

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100-41-4	Ethylbenzene
71-43-2	Benzene
50-00-0	Formaldehyde
140-88-5	Ethyl acrylate
91-20-3	Naphthalene
98-82-8	Cumene
	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
108-88-3	Toluene
71-43-2	Benzene

**The components of this product are reported in the following inventories:**

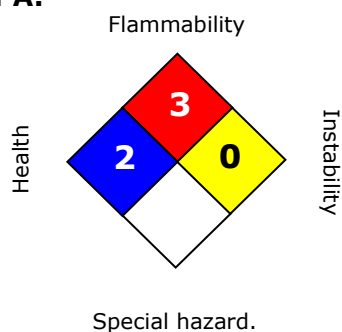
<b>Switzerland. New notified substances and declared preparations</b>	:	y (positive listing) (The formulation contains substances listed on the Swiss Inventory)
<b>United States TSCA Inventory</b>	:	y (positive listing) (On TSCA Inventory)
<b>Canadian Domestic Substances List (DSL)</b>	:	y (positive listing) (All components of this product are on the Canadian DSL.)
<b>Australia Inventory of Chemical Substances (AICS)</b>	:	y (positive listing) (On the inventory, or in compliance with the inventory)
<b>New Zealand. Inventory of Chemical Substances</b>	:	n (Negative listing) (Not in compliance with the inventory)
<b>Japan. ENCS - Existing and New Chemical Substances Inventory</b>	:	n (Negative listing) (Not in compliance with the inventory)
<b>Japan. ISHL - Inventory of Chemical Substances (METI)</b>	:	n (Negative listing) (Not in compliance with the inventory)
<b>Korea. Korean Existing Chemicals Inventory (KECI)</b>	:	y (positive listing) (On the inventory, or in compliance with the inventory)

<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>	:	y (positive listing) (On the inventory, or in compliance with the inventory)
<b>China. Inventory of Existing Chemical Substances in China (IECSC)</b>	:	y (positive listing) (On the inventory, or in compliance with the inventory)

## SECTION 16. OTHER INFORMATION

VERSION 3.1  
REVISION DATE 10/20/2021

### NFPA:



### HMIS III:

<b>HEALTH</b>	<b>2*</b>
<b>FLAMMABILITY</b>	<b>3</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 =Extreme, \* = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

**Legacy MSDS:** R0374099

**Material number:**  
117095,

<b>Key or legend to abbreviations and acronyms used in the safety data sheet</b>
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ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%