



## SAFETY DATA SHEET

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### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Super Slow Urethane Reducer

**Product Code** 143-4

**Recommended Use** SOLVENT  
FOR PROFESSIONAL USE ONLY

**Manufacturer/Importer/Supplier/Distributor information**

**Company name** INTERNATIONAL AUTOBODY MARKETING GROUP  
**Address** 1505 NORTH HAYDEN RD, SUITE 111  
SCOTTSDALE, AZ 85257  
UNITED STATES

**Website** [www.advantagerefinish.com](http://www.advantagerefinish.com)

**Telephone** 1-87-REFINISH  
480.451.4451

**Emergency phone number** 800-424-9300 ChemTrec EMERGENCY 24 Hrs.

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

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## SECTION 5. FIREFIGHTING MEASURES

|                                      |   |
|--------------------------------------|---|
| Suitable extinguishing media         | : Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>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.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.<br>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**

Personal precautions,  
protective equipment and  
emergency procedures

: Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive  
concentrations. Vapours can accumulate in low areas.

Environmental precau-  
tions

: Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
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 con-  
tainer for disposal according to local / national regula-  
tions (see section 13).

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## **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling

: Avoid formation of aerosol.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before  
use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in  
the application area.  
Take precautionary measures against static discharg-  
es.  
Provide sufficient air exchange and/or exhaust in work  
rooms.  
Open drum carefully as content may be under pres-  
sure.  
Dispose of rinse water in accordance with local and  
national regulations.

Conditions for safe stor-  
age

: No smoking.  
Keep container tightly closed in a dry and well-  
ventilated place.

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Containers which are opened must be carefully re-sealed 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<br>(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<br>950 mg/m <sup>3</sup>               | NIOSH REL |
|          |                     | TWA                              | 150 ppm<br>710 mg/m <sup>3</sup>               | NIOSH REL |
|          |                     | TWA                              | 150 ppm<br>710 mg/m <sup>3</sup>               | OSHA Z-1  |
|          |                     | TWA                              | 150 ppm<br>710 mg/m <sup>3</sup>               | OSHA P0   |
|          |                     | STEL                             | 200 ppm<br>950 mg/m <sup>3</sup>               | OSHA P0   |
| 108-88-3 | Toluene             | TWA                              | 20 ppm   | ACGIH     |
|          |                     | TWA                              | 100 ppm<br>375 mg/m <sup>3</sup>               | NIOSH REL |
|          |                     | ST                               | 150 ppm<br>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<br>375 mg/m <sup>3</sup>               | OSHA P0   |
|          |                     | STEL                             | 150 ppm<br>560 mg/m <sup>3</sup>               | OSHA P0   |
| 78-93-3  | Methyl ethyl ketone | TWA                              | 200 ppm  | ACGIH     |
|          |                     | STEL                             | 300 ppm  | ACGIH     |
|          |                     | TWA                              | 200 ppm<br>590 mg/m <sup>3</sup>               | NIOSH REL |
|          |                     | ST                               | 300 ppm<br>885 mg/m <sup>3</sup>               | NIOSH REL |
|          |                     | TWA                              | 200 ppm<br>590 mg/m <sup>3</sup>               | OSHA Z-1  |
|          |                     | TWA                              | 200 ppm  | OSHA P0   |

|            |                                  |      |                                    |           |
|------------|----------------------------------|------|------------------------------------|-----------|
|            |                                  |      | 590 mg/m <sup>3</sup>              |           |
|            |                                  | STEL | 300 ppm<br>885 mg/m <sup>3</sup>   | OSHA P0   |
| 64742-49-0 | Naphtha (pet), hydrotreated lt   | TWA  | 500 ppm<br>2,000 mg/m <sup>3</sup> | OSHA Z-1  |
|            |                                  | TWA  | 400 ppm<br>1,600 mg/m <sup>3</sup> | OSHA P0   |
| 64742-89-8 | Solvent naphtha (pet), lt aliph. | TWA  | 500 ppm<br>2,000 mg/m <sup>3</sup> | OSHA Z-1  |
|            |                                  | TWA  | 400 ppm<br>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<br>435 mg/m <sup>3</sup>   | OSHA Z-1  |
| 100-41-4   | Ethylbenzene                     | TWA  | 20 ppm                             | ACGIH     |
|            |                                  | STEL | 125 ppm                            | ACGIH     |
|            |                                  | TWA  | 100 ppm<br>435 mg/m <sup>3</sup>   | NIOSH REL |
|            |                                  | ST   | 125 ppm<br>545 mg/m <sup>3</sup>   | NIOSH REL |
|            |                                  | TWA  | 100 ppm<br>435 mg/m <sup>3</sup>   | OSHA Z-1  |
|            |                                  | TWA  | 100 ppm<br>435 mg/m <sup>3</sup>   | OSHA P0   |
|            |                                  | STEL | 125 ppm<br>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)<br>(1013 hPa)                                |
| Flash point                                 | : -4 °C (25 °F)   |
| Evaporation rate                            | : 1<br>Ethyl Ether  |
| Flammability (solid, gas)                   | : No data available   |
| Burning rate                                | : No data available   |
| Upper explosion limit                       | : 10 %(V)<br>Calculated Explosive Limit                                   |
| Lower explosion limit                       | : 1 %(V)<br>Calculated Explosive Limit                                    |
| Vapour pressure                             | : 170.02 mmHg @ 20 °C (68 °F)<br>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)<br>7.4235 lb/gal @ 20 °C (68 °F) |
| Bulk density                                | : No data available   |
| Water solubility                            | : No data available   |
| Solubility in other sol-<br>vents           | : No data available   |
| Partition coefficient: n-<br>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<br>Method: Calculation method  |
| <b><u>Components:</u></b> |  |
| <b>763-69-9:</b>          |  |
| Acute oral toxicity       | : LD50 (rat, male): > 5,000 mg/kg<br>Method: OECD Test Guideline 401<br>GLP: yes   |
| Acute inhalation toxicity | : LC50 (rat): > 998 ppm<br>Exposure time: 6 h<br>Method: OECD Test Guideline 403<br>Symptoms: weight gain<br>GLP: No data available<br>Assessment: The component/mixture is low toxic after short term inhalation. |
| Acute dermal toxicity     | : LD50 (rabbit, male): 4,080 mg/kg<br>Method: OECD Test Guideline 402<br>Symptoms: no symptoms<br>GLP: no  |
| <b>123-86-4:</b>          |  |
| Acute oral toxicity       | : LD50 (rat): > 5,000 mg/kg<br>Method: OECD Test Guideline 423<br>GLP: no  |
| Acute inhalation toxicity | : LC50 (rat, male and female): > 21 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour<br>Method: OECD Test Guideline 403<br>GLP: yes   |
| Acute dermal toxicity     | : LD50 (rabbit, male and female): > 5,000 mg/kg<br>Method: OECD Test Guideline 402<br>GLP: yes   |
| <b>108-88-3:</b>          |  |
| Acute oral toxicity       | : LD50 (rat, male): > 5,580 mg/kg  |
| Acute inhalation toxicity | : LC50 (rat, male and female): 28.1 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour<br>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

**64742-49-0:**

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

**64742-89-8:**

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

**68410-97-9:**

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

**1330-20-7:**

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<br>Test species: mouse lymphoma cells<br>Result: positive  |
| Genotoxicity in vivo              | : Test Type: In vivo micronucleus test<br>Test species: mouse<br>Method: OECD Test Guideline 474<br>Result: positive   |
| Germ cell mutagenicity-Assessment | : Positive result(s) from in vivo heritable germ cell mutagenicity tests in mammals  |
| <b>1330-20-7:</b>                 |  |
| Genotoxicity in vitro             | : Test Type: Chromosome aberration test in vitro<br>Test species: Chinese hamster ovary (CHO)<br>Metabolic activation: with and without metabolic activation<br>Method: Mutagenicity (in vitro mammalian cytogenetic test)<br>Result: negative |
|                                   | : Test Type: Sister chromatid exchange assay in mammalian cells<br>Test species: Chinese hamster ovary (CHO)<br>Metabolic activation: with and without metabolic activation<br>Result: negative  |
| Genotoxicity in vivo              | : Test Type: Dominant lethal assay<br>Test species: mouse<br>Application Route: Subcutaneous<br>Exposure time: 8 wk<br>Dose: 1.0 mL/kg<br>Method: OECD Test Guideline 478<br>Result: negative<br>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<br>Test species: Chinese hamster ovary (CHO)<br>Metabolic activation: with and without metabolic activation<br>Method: OECD Test Guideline 473<br>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

---

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

---

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

|  |  |   |  |
|--|--|---|--|
|  |  | gle exposure, category 3 with narcotic effects. |  |
|--|--|---|--|

108-88-3:

| 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, single exposure, category 3 with narcotic effects. |          |

78-93-3:

| 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, single exposure, category 3 with narcotic effects. |          |

64742-49-0:

| 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, single exposure, category 3 with narcotic effects. |          |

64742-89-8:No data available

68410-97-9:

| 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, single exposure, category 3 with narcotic effects. |  |
|--|--|--|--|

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,<br>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:**

| Exposure routes: | Target Organs:                        | Assessment:  | Remarks: |
|------------------|---------------------------------------|--|----------|
|                  | 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:**

| Exposure routes: | Target Organs:  | Assessment:  | Remarks: |
|------------------|-----------------|--|----------|
|                  | 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<br>Exposure time: 96 h<br>Test Type: static test<br>Method: OECD Test Guideline 203<br>GLP: yes  |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia magna (Water flea)): 479.7 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: OECD Test Guideline 202<br>GLP: yes   |
| Toxicity to algae                                   | : EC50 (Pseudokirchneriella subcapitata (green algae)): > 114.86 mg/l<br>End point: Growth rate<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201<br>GLP: yes |
| Toxicity to bacteria                                | : IC50: > 5,000 mg/l<br>Exposure time: 16 h<br>Test Type: Growth inhibition<br>GLP:   |

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

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

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|  |  |
|--|--|
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : NOEC ( <i>Daphnia magna</i> (Water flea)): 23 mg/l<br>Exposure time: 21 d                              |
| Toxicity to bacteria   | : EC 50 ( <i>Tetrahymena pyriformis</i> (Ciliate)): 356 mg/l<br>Exposure time: 40 h<br>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 ( <i>Oncorhynchus mykiss</i> (rainbow trout)): 5.5 mg/l<br>Exposure time: 96 h<br>Test Type: flow-through test |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 ( <i>Ceriodaphnia dubia</i> ): 3.78 mg/l<br>Exposure time: 48 h<br>Test Type: Renewal                          |
| Toxicity to algae                                   | : EC50 ( <i>Chlorella vulgaris</i> (Fresh water algae)): 134 mg/l<br>Exposure time: 3 h<br>Test Type: static test     |
| Toxicity to bacteria                                | : IC50 (Bacteria): 84 mg/l<br>Exposure time: 24 h<br>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 ( <i>Pimephales promelas</i> (fathead minnow)): > 100 mg/l<br>Exposure time: 96 h                    |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 ( <i>Daphnia magna</i> (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Test Type: Immobilization |
| Toxicity to algae                                   | : EC50 ( <i>Pseudokirchneriella subcapitata</i> (green algae)): > 100 mg/l<br>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: Methylethyl 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 % |
|---------|--------------|----------|

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I 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)<br>(The formulation contains substances listed on the Swiss Inventory) |
| <b>United States TSCA Inventory</b>                                   | : | y (positive listing)<br>(On TSCA Inventory)   |
| <b>Canadian Domestic Substances List (DSL)</b>                        | : | y (positive listing)<br>(All components of this product are on the Canadian DSL.)           |
| <b>Australia Inventory of Chemical Substances (AICS)</b>              | : | y (positive listing)<br>(On the inventory, or in compliance with the inventory)             |
| <b>New Zealand. Inventory of Chemical Substances</b>                  | : | n (Negative listing)<br>(Not in compliance with the inventory)                              |
| <b>Japan. ENCS - Existing and New Chemical Substances Inventory</b>   | : | n (Negative listing)<br>(Not in compliance with the inventory)                              |
| <b>Japan. ISHL - Inventory of Chemical Substances (METI)</b>          | : | n (Negative listing)<br>(Not in compliance with the inventory)                              |
| <b>Korea. Korean Existing Chemicals Inventory (KECI)</b>              | : | y (positive listing)<br>(On the inventory, or in compliance with the inventory)             |

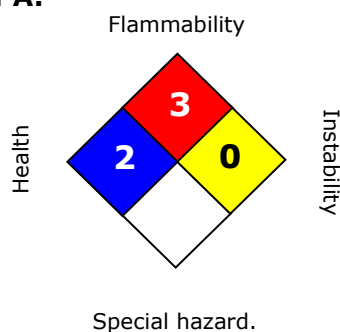
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|   |   |   |
|---|---|---|
| <b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b> | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| <b>China. Inventory of Existing Chemical Substances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

## SECTION 16. OTHER INFORMATION

VERSION 3.0  
REVISION DATE 06/20/2019

### 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,

**Key or legend to abbreviations and acronyms used in the safety data sheet**

|        |  |       |  |
|--------|--|-------|--|
| 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%   |