

# SAFETY DATA SHEET

Electro-Wash (R) PX

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Identification of the substance or mixture

**Product name** : Electro-Wash (R) PX  
**Synonyms** : ES1010E , ES810E, ES1210, ES810  
**Product type** : Aerosol.  
**Use of the substance/mixture** : Cleaners. Degreasers.

### Company/undertaking identification

**Manufacturer** : ITW Chemtronics  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
  
Tel. 770-424-4888 or toll free 800-645-5244

**Distributor** :

**Importer** : ITW Contamination Control BV  
Saffierlaan 5  
VZ-2132 Hoofddorp  
The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400  
FAX: +31 88 1307 499

**e-mail address of person responsible for this SDS** : askchemtronics@chemtronics.com

**Emergency telephone number (with hours of operation)** : Chemtrec - 1-800-424-9300 or collect 703-527-3887

## 2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : F; R11  
Xi; R38  
R67  
N; R51/53

**Physical/chemical hazards** : Highly flammable.

**Human health hazards** : Irritating to skin. Vapours may cause drowsiness and dizziness.

**Environmental hazards** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 11 for more detailed information on health effects and symptoms.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** : Mixture

Ingredient name	CAS number	%	EC number	Classification
ethanol	64-17-5	10 - 20	200-578-6	F; R11 [2]
propane	74-98-6	10 - 20	200-827-9	F+; R12 [2]
Isobutane	75-28-5	10 - 20	200-857-2	F+; R12 [2]
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	107-83-5	5 - 20	203-523-4	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	79-29-8	0 - 10	201-193-6	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	96-14-0	0 - 10	202-481-4	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
propan-2-ol	67-63-0	1 - 5	200-661-7	F; R11 [1] [2] Xi; R36 R67
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	75-83-2	0 - 5	200-906-8	F; R11 [1] [2] Xn; R65 Xi; R38

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1/9

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

n-hexane	110-54-3	0 - 1	203-777-6	R67 N; R51/53 F; R11 [1] [2] Repr. Cat. 3; R62 Xn; R48/20, R65 Xi; R38 R67 N; R51/53
See Section 16 for the full text of the R-phrases declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

**4. FIRST AID MEASURES****First-aid measures**

- Inhalation** : Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See Section 11 for more detailed information on health effects and symptoms.

**5. FIRE-FIGHTING MEASURES****Extinguishing media**

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.
- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Empty containers retain product residue and can be hazardous.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

### Packaging materials

- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
ethanol	<b>ACGIH TLV (United States, 1/2009).</b> STEL: 1000 ppm 15 minute(s).
propane	<b>ACGIH TLV (United States, 1/2009).</b> TWA: 1000 ppm 8 hour(s).
Isobutane	<b>ACGIH TLV (United States, 1/2009).</b> TWA: 1000 ppm 8 hour(s).
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	<b>ACGIH TLV (United States, 1/2009).</b> TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m <sup>3</sup> 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m <sup>3</sup> 15 minute(s).
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	<b>ACGIH TLV (United States, 1/2009).</b> TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m <sup>3</sup> 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m <sup>3</sup> 15 minute(s).
hexane, reaction mass of isomers containing < 5 % n-hexane (203-777-6)	<b>ACGIH TLV (United States, 1/2009).</b> TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m <sup>3</sup> 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m <sup>3</sup> 15 minute(s).
propan-2-ol	<b>ACGIH TLV (United States, 1/2009).</b> STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
hexane, reaction mass of isomers containing <	<b>ACGIH TLV (United States, 1/2009).</b>

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

5 % n-hexane (203-777-6)	TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m <sup>3</sup> 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m <sup>3</sup> 15 minute(s).
n-hexane	<b>EU OEL (Europe, 4/2006). Notes: Indicative</b> Limit value: 72 mg/m <sup>3</sup> 8 hour(s). Limit value: 20 ppm 8 hour(s).

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

**Exposure controls**

- Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**9. PHYSICAL AND CHEMICAL PROPERTIES****General information****Appearance**

- Physical state** : Liquid. [Aerosol. Liquid.]
- Colour** : Clear. Colourless.
- Odour** : Hydrocarbon. [Slight]

**Important health, safety and environmental information**

- Boiling point** : 50°C (122°F)
- Melting point** : May start to solidify at the following temperature: -88.9°C (-128°F) This is based on data for the following ingredient: propan-2-ol. Weighted average: -126.34°C (-195.4°F)
- Flash point** : Closed cup: Lower than -18°C (0°F). (Tagliabue.)
- Explosion limits** : Lower: 1.2% Upper: 7.7%
- Vapour pressure** : 26.4 kPa (198 mm Hg) (at 20°C)
- Relative density** : Weighted average: 0.64 (Water = 1)
- Vapour density** : >1 (Air = 1)
- Evaporation rate (butyl acetate = 1)** : >1 compared with butyl acetate

**Other information**

- Auto-ignition temperature** : Lowest known value: 277.85°C (532.1°F) (3-methylpentane).

**10. STABILITY AND REACTIVITY**

- Stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Avoid release to the environment. Refer to special instructions/safety data sheet.
- Materials to avoid** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

Potential acute health effects

- Inhalation** : Vapours may cause drowsiness and dizziness.  
**Ingestion** : Irritating to mouth, throat and stomach.  
**Skin contact** : Irritating to skin.  
**Eye contact** : No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LD50 Intra-arterial	Rat	11 mg/kg	-
	LD50 Intraperitoneal	Rat	3600 ug/kg	-
	LD50 Intravenous	Rat	1440 mg/kg	-
	LD50 Oral	Rat	7 g/kg	-
	LD50 Oral	Rat	7060 mg/kg	-
	LDLo Dermal	Rabbit	20 g/kg	-
	TDLo Intracerebral	Rat	363.6 ug/kg	-
	TDLo Intracerebral	Rat	106 ug/kg	-
	TDLo Intraperitoneal	Rat	2.45 g/kg	-
	TDLo Intraperitoneal	Rat	2 g/kg	-
	TDLo Intraperitoneal	Rat - Male	1.5 g/kg	-
	TDLo Intraperitoneal	Rat	1.2 g/kg	-
	TDLo Intraperitoneal	Rat - Male	1 g/kg	-
	TDLo Intraperitoneal	Rat - Male	0.5 g/kg	-
	TDLo Intraperitoneal	Rat	0.25 g/kg	-
	TDLo Intraperitoneal	Rat	3500 mg/kg	-
	TDLo Intraperitoneal	Rat - Male	3000 mg/kg	-
	TDLo Intraperitoneal	Rat	2700 mg/kg	-
	TDLo Intraperitoneal	Rat	2000 mg/kg	-
	TDLo Intraperitoneal	Rat - Female	1000 mg/kg	-
	TDLo Intraperitoneal	Rat	500 mg/kg	-
	TDLo Intraperitoneal	Rat	2.4 mg/kg	-
	TDLo Intraperitoneal	Rat	1.25 mg/kg	-
	TDLo Intraperitoneal	Rat - Male	0.5 g/kg	-
	TDLo Oral	Rat	6.4 g/kg	-
	TDLo Oral	Rat	6 g/kg	-
	TDLo Oral	Rat	5.25 g/kg	-
	TDLo Oral	Rat	5 g/kg	-
	TDLo Oral	Rat	3 g/kg	-
	TDLo Oral	Rat	2.5 g/kg	-
	TDLo Oral	Rat	0.72 g/kg	-
	TDLo Oral	Rat - Male	0.5 g/kg	-
	TDLo Oral	Rat	0.4 g/kg	-
	TDLo Oral	Rat	10 mL/kg	-
	TDLo Oral	Rat - Male	5 mL/kg	-
	TDLo Oral	Rat	4.44 mL/kg	-
	TDLo Oral	Rat	4 mL/kg	-
	TDLo Oral	Rat	8000 mg/kg	-
	TDLo Oral	Rat - Female	6000 mg/kg	-
	TDLo Oral	Rat - Male	5250 mg/kg	-
	TDLo Oral	Rat	5000 mg/kg	-
	TDLo Oral	Rat	4800 mg/kg	-
	TDLo Oral	Rat	4300 mg/kg	-
	TDLo Oral	Rat	1600 mg/kg	-
	TDLo Oral	Rat	1500 mg/kg	-
	TDLo Unreported	Rat	3 g/kg	-
	LC50 Inhalation Gas.	Rat	20000 ppm	10 hours
Isobutane	LC50 Inhalation Vapour	Rat	658000 mg/m3	4 hours
	LC50 Inhalation	Rat	57 pph	15 minutes

## 11. TOXICOLOGICAL INFORMATION

	Gas.	Rat	57 pph	15 minutes
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Intraperitoneal	Rat	2735 mg/kg	-
	LD50 Intravenous	Rat	1088 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	TDL <sub>o</sub>	Rat	800 mg/kg	-
	LC50 Inhalation Gas.	Rat	16000 ppm	8 hours
	LD50 Oral	Rat	25 g/kg	-
n-hexane	LDLo Intraperitoneal	Rat	9100 mg/kg	-
	TDL <sub>o</sub> Oral	Rat	20000 mg/kg	-
	LC50 Inhalation Vapour	Rat	627000 mg/m <sup>3</sup>	3 minutes
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours

### Potential chronic health effects

<b>Chronic effects</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Inhalation</b>	: Adverse symptoms may include the following: nausea or vomiting respiratory tract irritation coughing headache drowsiness/fatigue dizziness/vertigo
<b>Ingestion</b>	: No specific data.
<b>Skin</b>	: Adverse symptoms may include the following: irritation redness
<b>Eyes</b>	: Adverse symptoms may include the following: irritation redness
<b>Target organs</b>	: Contains material which causes damage to the following organs: the nervous system, eye, lens or cornea. Contains material which may cause damage to the following organs: blood, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS).

## 12. ECOLOGICAL INFORMATION

**Environmental effects** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
ethanol	-	Acute EC50 >100 ppm Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute EC50 2000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 5680 to 7392 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	-	Acute LC50 13 to 16 ml/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 0.8 g	96 hours
	-	Acute LC50 1420000 to 15100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 30 days - 19.4 mm - 0.099 g	96 hours

## 12. ECOLOGICAL INFORMATION

-	Acute LC50 13480000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
-	Acute LC50 11000000 ug/L Marine water	Fish - Bleak - Alburnus alburnus - 8 to 10 cm	96 hours
-	Acute LC50 10000000 to 11500000 ug/L Marine water	Fish - Bleak - Alburnus alburnus - 8 cm	96 hours
-	Acute LC50 6772000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
-	Acute LC50 6386000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
-	Acute LC50 6325000 to 7413000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
-	Acute LC50 6076000 to 7115000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
-	Acute LC50 5577000 to 6557000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
-	Acute LC50 3715000 to 4432000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
-	Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours
-	Acute LC50 42000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	4 days
-	Acute LC50 25500 ug/L Marine water	Crustaceans - Brine shrimp - Artemia franchiscana - LARVAE	48 hours
-	Chronic NOEC <6.3 g/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
propan-2-ol	Acute LC50 11130000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
-	Acute LC50 10400000 to 10600000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 29 days - 20 mm - 0.103 g	96 hours
-	Acute LC50	Fish - Fathead	96 hours

**12. ECOLOGICAL INFORMATION**

		9640000 to 10000000 ug/L Fresh water	minnow - Pimephales promelas - 31 days - 20.6 mm - 0.117 g	
	-	Acute LC50 6550000 to 7450000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 17.4 mm - 0.082 g	96 hours
	-	Acute LC50 4200000 ug/L Fresh water	Fish - Harlequinfish, red rasbora - Rasbora heteromorpha - 1 to 3 cm	96 hours
	-	Acute LC50 1400000 to 1950000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis - 20 to 30 mm	96 hours
n-hexane	-	Acute LC50 113000 ug/L Fresh water	Fish - Mozambique tilapia - Tilapia mossambica - 99 mm - 10 g	96 hours
	-	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours

**Conclusion/Summary** : Not available.

**Biodegradability**

**Conclusion/Summary** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

**13. DISPOSAL CONSIDERATIONS**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Do not puncture or incinerate container.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**14. TRANSPORT INFORMATION****International transport regulations**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	UN1950	AEROSOLS	2	-		-
<b>ADN/ADNR Class</b>	UN1950	AEROSOLS	2	-		-
<b>IMDG Class</b>	UN1950	AEROSOLS(Limited quantity)	2.1	-		-
<b>IATA Class</b>	UN1950	Aerosols, flammable	2.1	-		-

PG\* : Packing group



**15. REGULATORY INFORMATION****EU regulations**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols :**



Highly flammable, Irritant, Dangerous for the environment

**Risk phrases**

- : R11- Highly flammable.  
 R38- Irritating to skin.  
 R67- Vapours may cause drowsiness and dizziness.  
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases**

- : S23- Do not breathe [\*\*\*].  
 S38- In case of insufficient ventilation, wear suitable respiratory equipment.  
 S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

**Product use**

- : Industrial applications, Used by spraying.

**Europe inventory**

- : All components are listed or exempted.

**Other EU regulations**

**Additional warning phrases**

- : Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

**16. OTHER INFORMATION**

**Full text of R-phrases**

referred to in sections 2 and 3 - Europe

- : R12- Extremely flammable.  
 R11- Highly flammable.  
 R62- Possible risk of impaired fertility.  
 R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 R65- Harmful: may cause lung damage if swallowed.  
 R36- Irritating to eyes.  
 R38- Irritating to skin.  
 R67- Vapours may cause drowsiness and dizziness.  
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications**

referred to in sections 2 and 3 - Europe

- : F+ - Extremely flammable  
 F - Highly flammable  
 Repr. Cat. 3 - Toxic to reproduction category 3  
 Xn - Harmful  
 Xi - Irritant  
 N - Dangerous for the environment

**History**

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**Date of previous issue** : No previous validation.

**Version** : 8

**Prepared by** : Not available.

☑ Indicates information that has changed from previously issued version.

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

# SAFETY DATA SHEET

Electro-Wash MX Wipes

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Identification of the substance or mixture

**Product name** : Electro-Wash MX Wipes**Synonyms** : CP421**Product type** : Liquid.**Use of the substance/mixture** : CLEANING PRODUCTS

### Company/undertaking identification

**Manufacturer** : ITW Chemtronics  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
  
Tel. 770-424-4888 or toll free 800-645-5244**Distributor** :**Importer** : ITW Contamination Control BV  
Saffierlaan 5  
VZ-2132 Hoofddorp  
The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400

FAX: +31 88 1307 499

**e-mail address of person responsible for this SDS** : askchemtronics@chemtronics.com**Emergency telephone number (with hours of operation)** : Chemtrec - 1-800-424-9300 or collect 703-527-3887

## 2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : F; R11  
R67**Physical/chemical hazards** : Highly flammable.**Human health hazards** : Vapours may cause drowsiness and dizziness.**See Section 11 for more detailed information on health effects and symptoms.**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** : Mixture

Ingredient name	CAS number	%	EC number	Classification
ethanol	64-17-5	1 - 25	200-578-6	F; R11 [2]
propan-2-ol	67-63-0	1 - 20	200-661-7	F; R11 [1] [2] Xi; R36 R67
ethyl acetate	141-78-6	0.1 - 10	205-500-4	F; R11 [1] [2] Xi; R36 R66, R67
<b>See Section 16 for the full text of the R-phrases declared above.</b>				

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

**Occupational exposure limits, if available, are listed in Section 8.**

## 4. FIRST AID MEASURES

### First-aid measures

**Inhalation** : Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## 4. FIRST AID MEASURES

- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately. **ASPIRATION HAZARD.**
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See Section 11 for more detailed information on health effects and symptoms.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Highly flammable liquid. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

- Handling** : Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Store and use away from heat, sparks, open flame or any other ignition source.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame).
- Packaging materials**
- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
ethanol	<b>ACGIH TLV (United States, 1/2009).</b> STEL: 1000 ppm 15 minute(s).
propan-2-ol	<b>ACGIH TLV (United States, 1/2009).</b> STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
ethyl acetate	<b>ACGIH TLV (United States, 1/2009).</b> TWA: 1440 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

### Exposure controls

- Occupational exposure controls** : If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.
- Hand protection** : Use chemical-resistant, impervious gloves.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Alcohol-like.

### Important health, safety and environmental information

- Boiling point** : Lowest known value: 77.2°C (171°F) (ethyl acetate). Weighted average: 103.82°C (218.9°F)
- Melting point** : May start to solidify at the following temperature: <-20°C (<-4°F) This is based on data for the following ingredient: Alkanes, C7-10-iso-. Weighted average: -43.34°C (-46°F)
- Flash point** : Closed cup: 7°C (44.6°F). (Tagliabue.)
- Explosive properties** : Not considered to be a product presenting a risk of explosion.
- Explosion limits** : Greatest known range: Lower: 0.7% Upper: 6% (Alkanes, C7-10-iso-)
- Vapour pressure** : 4.8 kPa (36 mm Hg) (at 20°C)
- Relative density** : 0.72 (Water = 1)
- Vapour density** : >1 (Air = 1)
- Evaporation rate (butyl acetate = 1)** : 1.6 compared with butyl acetate

### Other information

- Auto-ignition temperature** : Lowest known value: 380°C (716°F) (Alkanes, C7-10-iso-).

## 10. STABILITY AND REACTIVITY

- Stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not allow vapor to accumulate in low or confined areas. Avoid exposure - obtain special instructions before use.
- Materials to avoid** : Highly reactive or incompatible with the following materials:  
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

Potential acute health effects

- Inhalation** : Vapours may cause drowsiness and dizziness.  
**Ingestion** : No known significant effects or critical hazards.  
**Skin contact** : May cause skin irritation.  
**Eye contact** : May cause eye irritation.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LD50 Intra-arterial	Rat	11 mg/kg	-
	LD50 Intraperitoneal	Rat	3600 ug/kg	-
	LD50 Intravenous	Rat	1440 mg/kg	-
	LD50 Oral	Rat	7 g/kg	-
	LD50 Oral	Rat	7060 mg/kg	-
	LDLo Dermal	Rabbit	20 g/kg	-
	TDLo Intracerebral	Rat	363.6 ug/kg	-
	TDLo Intracerebral	Rat	106 ug/kg	-
	TDLo Intraperitoneal	Rat	2.45 g/kg	-
	TDLo Intraperitoneal	Rat	2 g/kg	-
	TDLo Intraperitoneal	Rat - Male	1.5 g/kg	-
	TDLo Intraperitoneal	Rat	1.2 g/kg	-
	TDLo Intraperitoneal	Rat - Male	1 g/kg	-
	TDLo Intraperitoneal	Rat - Male	0.5 g/kg	-
	TDLo Intraperitoneal	Rat	0.25 g/kg	-
	TDLo Intraperitoneal	Rat	3500 mg/kg	-
	TDLo Intraperitoneal	Rat - Male	3000 mg/kg	-
	TDLo Intraperitoneal	Rat	2700 mg/kg	-
	TDLo Intraperitoneal	Rat	2000 mg/kg	-
	TDLo Intraperitoneal	Rat - Female	1000 mg/kg	-
	TDLo Intraperitoneal	Rat	500 mg/kg	-
	TDLo Intraperitoneal	Rat	2.4 mg/kg	-
	TDLo Intraperitoneal	Rat	1.25 mg/kg	-
	TDLo Intraperitoneal	Rat - Male	0.5 g/kg	-
	TDLo Oral	Rat	6.4 g/kg	-
	TDLo Oral	Rat	6 g/kg	-
	TDLo Oral	Rat	5.25 g/kg	-
	TDLo Oral	Rat	5 g/kg	-
	TDLo Oral	Rat	3 g/kg	-
	TDLo Oral	Rat	2.5 g/kg	-
	TDLo Oral	Rat	0.72 g/kg	-
	TDLo Oral	Rat - Male	0.5 g/kg	-
	TDLo Oral	Rat	0.4 g/kg	-
	TDLo Oral	Rat	10 mL/kg	-
	TDLo Oral	Rat - Male	5 mL/kg	-
	TDLo Oral	Rat	4.44 mL/kg	-
	TDLo Oral	Rat	4 mL/kg	-
	TDLo Oral	Rat	8000 mg/kg	-
	TDLo Oral	Rat - Female	6000 mg/kg	-
	TDLo Oral	Rat - Male	5250 mg/kg	-
	TDLo Oral	Rat	5000 mg/kg	-
	TDLo Oral	Rat	4800 mg/kg	-
	TDLo Oral	Rat	4300 mg/kg	-
	TDLo Oral	Rat	1600 mg/kg	-
	TDLo Oral	Rat	1500 mg/kg	-
	TDLo Unreported	Rat	3 g/kg	-
	LC50 Inhalation Gas.	Rat	20000 ppm	10 hours
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Intraperitoneal	Rat	2735 mg/kg	-

## 11. TOXICOLOGICAL INFORMATION

	LD50 Intravenous	Rat	1088 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	TDL <sub>o</sub>	Rat	800 mg/kg	-
	Intraperitoneal LC50 Inhalation Gas.	Rat	16000 ppm	8 hours
ethyl acetate	LD50 Dermal	Rabbit	>20 mL/kg	-
	LD50 Oral	Rat	5620 mg/kg	-
	LDLo Subcutaneous	Rat	5 g/kg	-
	LC50 Inhalation Gas.	Rat	>6000 ppm	6 hours
	LC50 Inhalation Gas.	Rat	1600 ppm	8 hours

### Potential chronic health effects

<b>Chronic effects</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Inhalation</b>	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo
<b>Ingestion</b>	: No specific data.
<b>Skin</b>	: No specific data.
<b>Eyes</b>	: No specific data.
<b>Target organs</b>	: Contains material which causes damage to the following organs: the nervous system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

## 12. ECOLOGICAL INFORMATION

**Environmental effects** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
ethanol	-	Acute EC50 >100 ppm Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute EC50 2000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 5680 to 7392 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	-	Acute LC50 13 to 16 ml/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 0.8 g	96 hours
	-	Acute LC50 14200000 to 15100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 30 days - 19.4 mm - 0.099 g	96 hours
	-	Acute LC50 13480000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
	-	Acute LC50 11000000 ug/L Marine water	Fish - Bleak - Alburnus alburnus - 8 to 10	96 hours

## 12. ECOLOGICAL INFORMATION

	-	Acute LC50 10000000 to 11500000 ug/L Marine water	cm Fish - Bleak - Alburnus alburnus - 8 cm	96 hours
	-	Acute LC50 6772000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	-	Acute LC50 6386000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	-	Acute LC50 6325000 to 7413000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	-	Acute LC50 6076000 to 7115000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	-	Acute LC50 5577000 to 6557000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	-	Acute LC50 3715000 to 4432000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	-	Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours
	-	Acute LC50 42000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	4 days
	-	Acute LC50 25500 ug/L Marine water	Crustaceans - Brine shrimp - Artemia franchiscana - LARVAE	48 hours
	-	Chronic NOEC <6.3 g/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
propan-2-ol	-	Acute LC50 11130000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
	-	Acute LC50 10400000 to 10600000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 29 days - 20 mm - 0.103 g	96 hours
	-	Acute LC50 9640000 to 10000000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.6 mm - 0.117 g	96 hours
	-	Acute LC50 6550000 to 7450000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 17.4 mm - 0.082 g	96 hours
	-	Acute LC50 4200000 ug/L	Fish - Harlequinfish, red	96 hours

## 12. ECOLOGICAL INFORMATION

		Fresh water	rasbora - Rasbora heteromorpha - 1 to 3 cm	
	-	Acute LC50 1400000 to 1950000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis - 20 to 30 mm	96 hours
ethyl acetate	-	Acute LC50 1600000 ug/L Fresh water	Crustaceans - Aquatic sowbug - Asellus aquaticus	48 hours
	-	Acute LC50 819000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <1 days	48 hours
	-	Acute LC50 786000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <1 days	48 hours
	-	Acute LC50 778000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <1 days	48 hours
	-	Acute LC50 698000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <1 days	48 hours
	-	Acute LC50 660000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <1 days	48 hours
	-	Acute LC50 560000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <1 days	48 hours
	-	Acute LC50 484000 to 602000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	-	Acute LC50 425300 to 500000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	-	Acute LC50 295000 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex - <1 days	48 hours
	-	Acute LC50 230000 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex - <1 days	48 hours
	-	Acute LC50 230000 to 250000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 29 to 30 days - 18.2 mm - 0.106 g	96 hours
	-	Acute LC50 212500 to 225420 ug/L Fresh water	Fish - Indian catfish - Heteropneustes fossilis - 14.16 cm - 25.54 g	96 hours
	-	Acute LC50 175000 ug/L Fresh water	Daphnia - Water flea - Daphnia cucullata - 11 days	48 hours
	-	Acute LC50 154000 ug/L Fresh water	Daphnia - Water flea - Daphnia cucullata - 11 days	48 hours

**Conclusion/Summary** : Not available.

**Biodegradability**

**Conclusion/Summary** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.







**13. DISPOSAL CONSIDERATIONS**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**14. TRANSPORT INFORMATION**International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class				II		Not regulated.
ADN/ADNR Class						Not regulated.
IMDG Class				-		-Not regulated.
IATA Class						-Not regulated.

PG\* : Packing group

**15. REGULATORY INFORMATION**EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols** :



Highly flammable

**Risk phrases** : R11- Highly flammable.

**Product use** : Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Europe inventory** : All components are listed or exempted.

**16. OTHER INFORMATION**

**Full text of R-phrases referred to in sections 2 and 3 - Europe** : R11- Highly flammable.  
R36- Irritating to eyes.  
R66- Repeated exposure may cause skin dryness or cracking.  
R67- Vapours may cause drowsiness and dizziness.

**Full text of classifications referred to in sections 2 and 3 - Europe** : F - Highly flammable  
Xi - Irritant

History

**Date of printing** : 12/15/2011.

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**Date of previous issue** : No previous validation.

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**Prepared by** : Not available.

☑ Indicates information that has changed from previously issued version.

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