# SAFETY DATA SHEET

## Electro-Wash MX

## 1. Identification of the substance/preparation and of the company/undertaking

**Identification of the substance or preparation**

**Product name** : **Electro-Wash MX**

**Synonyms** : ES1621E, CP421, T021

**Use of the substance/preparation** : CLEANING PRODUCTS

**Company/undertaking identification**

**Manufacturer** : ITW Chemtronics
8125 Cobb Center Drive
Kennesaw, GA 30152

**Supplier** : [
[
[
[

**Importer** : ITW Contamination Control
Skejby Nordlandsvej 307
DK-8200 Aarhus N
Denmark
Tel +45 87 400 220
Fax +45 87 400 222
Email: info@itw-cc.com

**Emergency telephone number** : Chemtrec - 1-800-424-9300 or collect 703-527-3887

## 2. Composition/information on ingredients

**Substance/Preparation** : Preparation

| Ingredient Name | CAS number | % | EC Number | Classification |
|---|---|---|---|---|
| Ethanol | 64-17-5 | 1-25 | 200-578-6 | F; R11 |
| propan-2-ol | 67-63-0 | 1-20 | 200-661-7 | F; R11<br>Xi; R36<br>R67 |
| Ethyl acetate | 141-78-6 | 0.1-10 | 205-500-4 | F; R11<br>Xi; R36<br>R66, 67 |
| **See Section 16 for the full text of the R Phrases declared above** | | | | |

*** Occupational Exposure Limit(s), if available, are listed in Section 8**

## 3. Hazards identification

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

**Classification** : R11- Highly flammable.R67- Vapours may cause drowsiness and dizziness.

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

**Human health hazards** : Irritating to eyes and skin.

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

## 4. First aid measures

**First aid measures**

**Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

**Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.ASPIRATION HAZARD.

**Skin Contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention.

**Eye contact** : In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.

**Specific treatments** :

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

## 5. Fire-fighting measures

**Extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical, or $CO_2$.

**Special exposure hazards** : Highly flammable liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas, travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal decomposition products** : These products are carbon oxides (CO, $CO_2$).

**Special protective equipment for fire-fighters** : Fire-fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

## 6. Accidental release measures

**Personal Precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5). Do not touch or walk through spilled material.

**Environmental precautions and cleanup methods** : Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

**Note: See section 8 for personal protective equipment and section 13 for waste disposal.**

## 7. Handling and storage

**Handling** : Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

**Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

**Packaging materials**

**Recommended** : Use original container.

**Specific uses** :

## 8. Exposure controls/personal protection

| Ingredient Name | Occupational Exposure Limits |
|---|---|
| Ethanol | **ACGIH TLV (United States, 2002). Notes: 1996 Adoption Refers to Appendix A -- Carcinogens.**<br>TWA: 1880 mg/m$^3$ 8 hour(s).<br>TWA: 1000 ppm 8 hour(s). |
| propan-2-ol | **ACGIH TLV (United States, 2000).**<br>STEL: 400 ppm 15 minute(s).<br>TWA: 200 ppm 8 hour(s). |
| Ethyl acetate | **ACGIH TLV (United States, 2000).**<br>TWA: 1440 mg/m$^3$ 8 hour(s).<br>TWA: 400 ppm 8 hour(s). |

**Exposure controls**

**Occupational exposure controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection** : Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).

**Hand protection** : Use chemical resistant, impervious gloves.

**Eye protection** : Safety glasses.

**Skin protection** : Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits).

## 9. Physical and chemical properties

**General information**

**Appearance**

**Physical state** : Liquid.

**Colour** : Colourless.

**Odour** : Alcohol-like.

**Odour threshold** : The lowest known value is 180 ppm (Ethanol)

**Important health, safety and environmental information**

**pH** : Not available.

**Boiling point** : The lowest known value is 77.28°C (171.1°F) (Ethyl acetate). Weighted average: 103.83°C (218.9°F)

**Melting point** : May start to solidify at <-20°C (-4°F) based on data for: ALKANES, C7-10-ISO-. Weighted average: -41.89°C (-43.4°F)

**Flash point** : CLOSED CUP: 7°C (44.6°F).

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

**Explosive properties** : Not considered as a product presenting risks of explosion.

**Explosion Limits** : The greatest known range is LOWER: 0.7% UPPER: 6% (ALKANES, C7-10-ISO-)

**Oxidising properties** : Not available.

**Vapour pressure** : 4.8 kPa (36 mm Hg) (at 20°C)

**Relative density** : Weighted average: 0.8 g/cm$^3$

**Solubility** : Easily soluble in cold water.

**Vapour density** : >1 (Air = 1)

**Evaporation rate (butyl acetate = 1)** : 1.6 compared to Butyl acetate.

**Other information**

**Auto-ignition temperature** : The lowest known value is 380°C (716°F) (ALKANES, C7-10-ISO-).

## 10. Stability and reactivity

**Stability** : The product is stable.

**Hazardous Decomposition Products** : These products are carbon oxides (CO, CO$_2$).

## 11. Toxicological information

**Potential Acute Health Effects**

**Inhalation** : Vapours may cause drowsiness and dizziness.

**Ingestion** : Ingestion may cause nausea, weakness and central nervous system effects.

**Skin Contact** : Irritating (EU).

**Eye contact** : Irritating (EU).

**Acute toxicity**

| Ingredient Name | Test | Result | Route | Species |
|---|---|---|---|---|
| Ethanol | LD50 | 7060 mg/kg | Oral | Rat |
| | LD50 | 6300 mg/kg | Oral | Rabbit |
| | LD50 | 3450 mg/kg | Oral | Mouse |
| | LDLo | 1400 mg/kg | Oral | human |
| | LDLo | 5500 mg/kg | Oral | Dog |
| | LC50 | 20000 (10 hour(s)) | Inhalation | Rat |
| propan-2-ol | LD50 | 5045 mg/kg | Oral | Rat |
| | LD50 | 6410 mg/kg | Oral | Rabbit |
| | LD50 | 3600 mg/kg | Oral | Mouse |
| | LD50 | 12800 mg/kg | Dermal | Rabbit |
| | LDLo | 1537 mg/kg | Oral | Dog |

| | | | | |
|---|---|---|---|---|
| | LDLo | 3570 mg/kg | Oral | human |
| | LDLo | 5272 mg/kg | Oral | man |
| Ethyl acetate | LD50 | 5620 mg/kg | Oral | Rat |
| | LD50 | 4935 mg/kg | Oral | Rabbit |
| | LD50 | 4100 mg/kg | Oral | Mouse |

**Over-exposure signs/symptoms**

**Target Organs** : Contains material which causes damage to the following organs: blood, kidneys, the nervous system, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

## 12. Ecological information

**Ecotoxicity Data**

| Ingredient Name | Species | Period | Result |
|---|---|---|---|
| Ethanol | Daphnia magna (EC50) | 48 hour(s) | 2 mg/l |
| | Daphnia magna (EC50) | 48 hour(s) | 9.3 mg/l |
| | Daphnia magna (EC50) | 48 hour(s) | >100 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | >100 mg/l |
| | Daphnia magna (LC50) | 96 hour(s) | >100 mg/l |
| | Oncorhynchus mykiss (LC50) | 96 hour(s) | 13000 mg/l |
| propan-2-ol | Pimephales promelas (EC50) | 48 hour(s) | 10000 mg/l |
| | Lepomis macrochirus (LC50) | 96 hour(s) | >1400 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 6550 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 9640 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 10400 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 11130 mg/l |
| Ethyl acetate | Pimephales promelas (EC50) | 48 hour(s) | 260 mg/l |
| | Scenedesmus subspicatus (EC50) | 48 hour(s) | 3300 mg/l |
| | Scenedesmus subspicatus (EC50) | 48 hour(s) | 5600 mg/l |
| | Pimephales promelas (LC50) | 96 hour(s) | 230 mg/l |
| | Oncorhynchus mykiss (LC50) | 96 hour(s) | 425.3 mg/l |
| | Oncorhynchus mykiss (LC50) | 96 hour(s) | 484 mg/l |

**Other adverse effects** : Not available.

## 13. Disposal considerations

**Methods of disposal** : Avoid contact of spilled material and runoff with soil and surface waterways. Dispose of according to all federal, state and local applicable regulations.

**Waste Classification** : Not applicable.

**European Waste Catalogue (EWC)** : Not available.

**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 | Class | Packing group | Label | Additional Information |
|---|---|---|---|---|---|---|
| **ADR/RID Class** | UN1950 | AEROSOLS, flammable | Class 2.1: Flammab gas. | I |  | - |
| **ADN Class** | UN1950 | AEROSOLS, flammable | ADN Class: Flammab liquid A. Flammab liquid with a flash point lower | I |  | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | than 21°C (70°F). | | | |
| **IMDG Class** | UN1950 | AEROSOLS, flammable | IMDG Class 2.1: Flammab gas. | - |  | - |
| **IATA-DGR Class** | UN1950 | AEROSOLS, flammable | IATA Class 2.1: Flammab gas. | I |  | - |

## 15. Regulatory information

**EU Regulations**

**Hazard symbol(s)** : 

Highly flammable

**Risk phrases** : R11- Highly flammable.
R67- Vapours may cause drowsiness and dizziness.

**Safety Phrases** : S2- Keep out of the reach of children.
S46- If swallowed, seek medical advice immediately and show this container or label.
S51- Use only in well-ventilated areas.

**Product Use** : Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC, including amendments and the intended use.

**EC Statistical Classification (Tariff Code)** : 32089091

## 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

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