SAFETY DATA SHEET

Chemtronics

Electro-Wash PX

Section 1. Identification

Product identifier : Electro-Wash PX

Product code : ES810, ES1210, ES1210A

Other means of identification : Processing aid Cleaner. Degreasers
ES810, ES1210, ES1210A
ES1210 (NSN 6850-01-393-9054)
Industrial/Professional use

Product type : Aerosol.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Processing aid Cleaner. Degreasers Product Application and Material uses Reference Website: or Label QR code

Uses advised against	Reason
Other	Industrial/Professional use

Supplier's details : Manufacturer
Chemtronics
8125 Cobb Center Drive
Kennesaw, GA 30152
Tel. 770-424-4888 or toll free 800-645-5244

Distributor
EMX Enterprises LTD
250 Granton Drive
Richmond Hill, ONT
Canada L4B 1H7
905-764-0040

Emergency telephone number (with hours of operation) : Chemtrec - 1-800-424-9300 or collect 703-527-3887
24/7

Section 2. Hazard identification

Classification of the substance or mixture : AEROSOLS - Category 1
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Extremely flammable aerosol. Pressurized container: may burst if heated.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.

Section 2. Hazard identification

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not pierce or burn, even after use.

Response : IF exposed or concerned: Get medical advice or attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Processing aid Cleaner. Degreasers
ES810, ES1210, ES1210A
ES1210 (NSN 6850-01-393-9054)
Industrial/Professional use

Ingredient name	Synonyms	% (w/w)	Identifiers	
2-Methylpentane	Pentane, 2-methyl-; Isohexane; hexane; 2-Methylpentane; Dimethylpropylmethane; 2-Methyl Pentene	≥10 - ≤30	CAS: 107-83-5	
3-Methylpentane	Pentane, 3-methyl-; 1,2,3-Trimethylpropane; hexane; Diethylmethylmethane; 3-methylbenzene	≥10 - ≤30	CAS: 96-14-0	
Neohexane	Butane, 2,2-dimethyl-; 2,2-Dimethyl-butane; NEOHEXANE; 2,2 DIMETHYL BUTANE; 2,2-Dimethylbutane (neohexane); Hexane	≥10 - ≤30	CAS: 75-83-2	
2,3-Dimethylbutane	Butane, 2,3-dimethyl-; Hexane; Diisopropyl; Dimethyl butane	≥10 - ≤30	CAS: 79-29-8	
Ethyl alcohol	ethyl alcohol; ALCOHOL; Ethyl alcohol (Ethanol); EtOH; Grain alcohol; Cologne spirit; undenatured ethyl alcohol, of an alcoholic strength by volume of 80 % or more and containing up to 20 % activated carbon; aqueous solution, containing by weight - 25 % or more, but not more than 35 % of a copolymer of vinyl caprolactam, vinyl pyrrolidone, N,N-dimethylaminopropyl methacrylamide and 3-(methacryloylamino) propyllauryldimethylammonium chloride, - 10 % or more, but not	≥10 - ≤30	CAS: 64-17-5	

Section 3. Composition/information on ingredients

	more than 16 % of ethanol whether or not denatured with tert-butyl alcohol and/or denatonium benzoate; Blend, consisting of ethyl alcohol, ethyl acetate and aldehydes, higher alcohols and water; blend, consisting of ethyl alcohol, ethyl acetate and water; Denatured Alcohol			
Isopropyl alcohol	isopropanol; 2-Propanol	≥3 - ≤7	CAS: 67-63-0	
Normal hexane	hexane; normal-Hexane; Hexyl hydride; hydrocarbons, C6, n-alkanes, iso-alkanes, cycloalkanes, with n-hexane containing at least 60% and less than 95% n-hexane; mixture of C6 aliphatic hydrocarbons (CAS RN 92112-69-1), containing by weight 60 % or more but not more than 80 % of n-hexane (CAS RN 110-54-3); Normal hexane; hexane, n-; hexane, (n)	≥1 - ≤5	CAS: 110-54-3	

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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

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

Section 4. First-aid measures

Description of necessary first aid measures

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.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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.

Ingestion : Wash out mouth with water. Remove dentures if any. 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. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Section 4. First-aid measures

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Causes skin irritation.

Ingestion : Do not ingest. If swallowed then seek immediate medical assistance.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. 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. 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
halogenated compounds
carbonyl halides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : 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.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : 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 pressurized 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled 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 and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid breathing gas. Avoid release to the environment. 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 only non-sparking tools. Empty containers retain product residue and can be hazardous.

Section 7. Handling and storage

Advice on general occupational hygiene : 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-Methylpentane	**CA Saskatchewan Provincial (Canada, 4/2021) [Hexane]** STEL 15 minutes: 1000 ppm. TWA 8 hours: 500 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane, all isomers except n-hexane]** TWA 8 hours: 200 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane]** Absorbed through skin. Notes: No British Columbia exposure limit at this time **CA Ontario Provincial (Canada, 6/2019) [Hexane isomers, other than n-hexane]** TWA 8 hours: 500 ppm. STEL 15 minutes: 1000 ppm. **CA Quebec Provincial (Canada, 2/2024) [Hexane]** TWAEV 8 hours: 500 ppm. TWAEV 8 hours: 1760 mg/m³. STEV 15 minutes: 1000 ppm. STEV 15 minutes: 3500 mg/m³. **CA Alberta Provincial (Canada, 3/2023)** OEL 15 minutes: 3500 mg/m³. OEL 8 hours: 1760 mg/m³. OEL 15 minutes: 1000 ppm. OEL 8 hours: 500 ppm.
3-Methylpentane	**CA Saskatchewan Provincial (Canada, 4/2021) [Hexane]** STEL 15 minutes: 1000 ppm. TWA 8 hours: 500 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane, all isomers except n-hexane]** TWA 8 hours: 200 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane]** Absorbed through skin. Notes: No British Columbia exposure limit at this time **CA Ontario Provincial (Canada, 6/2019) [Hexane isomers, other than n-hexane]** TWA 8 hours: 500 ppm. STEL 15 minutes: 1000 ppm.

Section 8. Exposure controls/personal protection

	CA Quebec Provincial (Canada, 2/2024) [Hexane] TWAEV 8 hours: 500 ppm. TWAEV 8 hours: 1760 mg/m³. STEV 15 minutes: 1000 ppm. STEV 15 minutes: 3500 mg/m³. **CA Alberta Provincial (Canada, 3/2023)** OEL 8 hours: 500 ppm. OEL 15 minutes: 1000 ppm. OEL 15 minutes: 3500 mg/m³. OEL 8 hours: 1760 mg/m³.
Neohexane	**CA Saskatchewan Provincial (Canada, 4/2021) [Hexane]** STEL 15 minutes: 1000 ppm. TWA 8 hours: 500 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane, all isomers except n-hexane]** TWA 8 hours: 200 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane]** Absorbed through skin. Notes: No British Columbia exposure limit at this time **CA Ontario Provincial (Canada, 6/2019) [Hexane isomers, other than n-hexane]** TWA 8 hours: 500 ppm. STEL 15 minutes: 1000 ppm. **CA Quebec Provincial (Canada, 2/2024) [Hexane]** TWAEV 8 hours: 500 ppm. TWAEV 8 hours: 1760 mg/m³. STEV 15 minutes: 1000 ppm. STEV 15 minutes: 3500 mg/m³. **CA Alberta Provincial (Canada, 3/2023) [Dimethylbutane]** OEL 8 hours: 1760 mg/m³. OEL 15 minutes: 1000 ppm. OEL 15 minutes: 3500 mg/m³. OEL 8 hours: 500 ppm. **CA Alberta Provincial (Canada, 3/2023) [Hexane]** OEL 8 hours: 1760 mg/m³. OEL 8 hours: 500 ppm. OEL 15 minutes: 3500 mg/m³. OEL 15 minutes: 1000 ppm.
2,3-Dimethylbutane	**CA Saskatchewan Provincial (Canada, 4/2021) [Hexane]** STEL 15 minutes: 1000 ppm. TWA 8 hours: 500 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane, all isomers except n-hexane]** TWA 8 hours: 200 ppm. **CA British Columbia Provincial (Canada, 3/2025) [hexane]** Absorbed through skin. Notes: No British Columbia exposure limit at this time **CA Ontario Provincial (Canada, 6/2019) [Hexane isomers, other than n-hexane]** TWA 8 hours: 500 ppm. STEL 15 minutes: 1000 ppm.

Section 8. Exposure controls/personal protection

	CA Quebec Provincial (Canada, 2/2024) [Hexane] TWAEV 8 hours: 500 ppm. TWAEV 8 hours: 1760 mg/m³. STEV 15 minutes: 1000 ppm. STEV 15 minutes: 3500 mg/m³. **CA Alberta Provincial (Canada, 3/2023) [Dimethylbutane]** OEL 8 hours: 1760 mg/m³. OEL 15 minutes: 1000 ppm. OEL 15 minutes: 3500 mg/m³. OEL 8 hours: 500 ppm. **CA Alberta Provincial (Canada, 3/2023) [Hexane]** OEL 8 hours: 1760 mg/m³. OEL 8 hours: 500 ppm. OEL 15 minutes: 3500 mg/m³. OEL 15 minutes: 1000 ppm.
Ethyl alcohol	**CA Saskatchewan Provincial (Canada, 4/2021)** STEL 15 minutes: 1250 ppm. TWA 8 hours: 1000 ppm. **CA British Columbia Provincial (Canada, 3/2025)** STEL 15 minutes: 1000 ppm. **CA Ontario Provincial (Canada, 6/2019)** STEL 15 minutes: 1000 ppm. **CA Quebec Provincial (Canada, 2/2024)** C3. STEV 15 minutes: 1000 ppm. **CA Alberta Provincial (Canada, 3/2023)** OEL 8 hours: 1000 ppm. OEL 8 hours: 1880 mg/m³.
Isopropyl alcohol	**CA Saskatchewan Provincial (Canada, 4/2021)** STEL 15 minutes: 400 ppm. TWA 8 hours: 200 ppm. **CA British Columbia Provincial (Canada, 3/2025)** TWA 8 hours: 200 ppm. STEL 15 minutes: 400 ppm. **CA Ontario Provincial (Canada, 6/2019)** TWA 8 hours: 200 ppm. STEL 15 minutes: 400 ppm. **CA Quebec Provincial (Canada, 2/2024)** TWAEV 8 hours: 200 ppm. STEV 15 minutes: 400 ppm. **CA Alberta Provincial (Canada, 3/2023)** OEL 15 minutes: 984 mg/m³. OEL 8 hours: 200 ppm. OEL 15 minutes: 400 ppm. OEL 8 hours: 492 mg/m³.
Normal hexane	**CA Saskatchewan Provincial (Canada, 4/2021)** Absorbed through skin. STEL 15 minutes: 62.5 ppm. TWA 8 hours: 50 ppm. **CA British Columbia Provincial (Canada, 3/2025)** Absorbed through skin. TWA 8 hours: 20 ppm. **CA Ontario Provincial (Canada, 6/2019)** Absorbed through skin.

Section 8. Exposure controls/personal protection

	TWA 8 hours: 50 ppm. **CA Quebec Provincial (Canada, 2/2024)** Absorbed through skin. TWAEV 8 hours: 50 ppm. TWAEV 8 hours: 176 mg/m³. **CA Alberta Provincial (Canada, 3/2023)** Absorbed through skin. OEL 8 hours: 50 ppm. OEL 8 hours: 176 mg/m³.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor 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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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.

Individual protection measures

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.

Eye/face 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Aerosol.]

Color : Clear. Colorless.

Odor : Hydrocarbon. Characteristic. [Slight]

Odor threshold : Not available.

pH : Not available.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : 50°C (122°F)

Flash point : Closed cup: -29°C (-20.2°F)

Evaporation rate : >1 (butyl acetate = 1)

Flammability : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : 26.4 kPa (198 mm Hg)

Relative vapor density : >1 [Air = 1]

Relative density : 0.7

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Heat of combustion : 19.75 kJ/g

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.

Particle characteristics

Median particle size : Not applicable.

Aerosol product

Type of aerosol : Spray

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame).

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Ethyl alcohol	**Rat - Oral - LD50** 7 g/kg Toxic effects: Behavioral - Aggression **Rat - Inhalation - LC50 Vapor** 124700 mg/m³ [4 hours]
Isopropyl alcohol	**Rabbit - Dermal - LD50** 12800 mg/kg **Rat - Oral - LD50** 5000 mg/kg Toxic effects: Behavioral - General anesthetic
Normal hexane	**Rat - Oral - LD50** 15840 mg/kg **Rat - Inhalation - LC50 Gas.** 48000 ppm [4 hours]

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name	Result
Ethyl alcohol	**Rabbit - Skin - Mild irritant** Amount/concentration applied: 400 mg **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 20 mg
Isopropyl alcohol	**Rabbit - Skin - Mild irritant** Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
Ethyl alcohol	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg **Rabbit - Eyes - Moderate irritant** Duration of treatment/exposure: 0.066666667 minutes Amount/concentration applied: 100 mg **Rabbit - Eyes - Moderate irritant** Amount/concentration applied: 100 uL **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 500 mg **Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 1 hours Amount/concentration applied: 50 pph
Isopropyl alcohol	**Rabbit - Eyes - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg **Rabbit - Eyes - Moderate irritant** Amount/concentration applied: 10 mg **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 100 mg
Normal hexane	**Rabbit - Eyes - Mild irritant** Amount/concentration applied: 10 mg

Section 11. Toxicological information

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Classification

Product/ingredient name	IARC	NTP	ACGIH
2-Methylpentane	-	-	A3
3-Methylpentane	-	-	A3
Neohexane	-	-	A3
2,3-Dimethylbutane	-	-	A3
Ethyl alcohol	-	-	A3
Isopropyl alcohol	3	-	-

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
Neohexane	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Normal hexane	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result

Section 11. Toxicological information

Normal hexane	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Aspiration hazard

Product/ingredient name	Result
2-Methylpentane	ASPIRATION HAZARD - Category 1
3-Methylpentane	ASPIRATION HAZARD - Category 1
Neohexane	ASPIRATION HAZARD - Category 1
2,3-Dimethylbutane	ASPIRATION HAZARD - Category 1
Normal hexane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Causes skin irritation.

Ingestion : Do not ingest. If swallowed then seek immediate medical assistance.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Section 11. Toxicological information

Not available.

Conclusion/Summary [Product] : Not available.

General : Causes damage to organs through prolonged or repeated exposure.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Ethyl alcohol	7000	N/A	N/A	124.7	N/A
Isopropyl alcohol	5000	12800	N/A	N/A	N/A
Normal hexane	15840	N/A	48000	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Ethyl alcohol	**Acute - LC50 - Fresh water** Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* 42 mg/l [4 days] Effect: Mortality **Acute - EC50 - Marine water** Algae - Green algae - *Ulva pertusa* 17.921 mg/l [96 hours] Effect: Reproduction **Chronic - NOEC - Marine water** Algae - Green algae - *Ulva pertusa* 4.995 mg/l [96 hours] Effect: Reproduction **Chronic - NOEC - Fresh water** Fish - Eastern mosquitofish - *Gambusia holbrooki* - Larvae Age: 3 days 0.375 µl/l [12 weeks] Effect: Morphology **Chronic - NOEC - Fresh water** Daphnia - Water flea - *Daphnia magna* - Neonate Age: <24 hours 100 µl/l [21 days] Effect: Mortality **Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* 2 mg/l [48 hours] Effect: Intoxication
Isopropyl alcohol	**Acute - LC50 - Marine water** Crustaceans - Common shrimp, sand shrimp - *Crangon crangon* 1400 mg/l [48 hours]

Section 12. Ecological information

	Effect: Mortality **Acute - LC50 - Fresh water** Fish - Harlequinfish, red rasbora - *Rasbora heteromorpha* Size: 1 to 3 cm 4200 mg/l [96 hours] Effect: Mortality
Normal hexane	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 31 days; Size: 20.4 mm; Weight: 0.123 g 2500 µg/l [96 hours] Effect: Mortality

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
3-Methylpentane	3.6	-	Low
Neohexane	3.82	-	Low
2,3-Dimethylbutane	3.42	-	Low
Ethyl alcohol	-0.35	-	Low
Isopropyl alcohol	0.05	-	Low
Normal hexane	4	501.187	High

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	TDG Classification	DOT Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950	ID8000
UN proper shipping name	Aerosols, flammable	Aerosols, flammable	AEROSOLS Limited quantity	Consumer commodity ID8000
Transport hazard class(es)	2.1 	2.1 	2.1 	9 
Packing group	-	-	-	-
Environmental hazards	No.	Yes.	No.	No.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).

DOT Classification : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 75 kg. Packaging instructions: Y963. Cargo Aircraft Only: 150 kg. Packaging instructions: Y963. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y963.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : The following components are listed: hexane; hexane; hexane; hexane; ethanol; isopropyl alcohol; n-hexane

CEPA Toxic substances : The following components are listed: hydrofluorocarbons; carbon dioxide

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Ingredient name	Status
HFC-152a	Annex F, Group I

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Section 15. Regulatory information

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Thailand : All components are listed or exempted.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

Section 16. Other information

History

Date of printing : 11/10/2025

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Version : 7

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
DOT = Department of Transportation
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
TDG = Transportation of Dangerous Goods
UN = United Nations

Procedure used to derive the classification

Classification	Justification
AEROSOLS - Category 1	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

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