SAFETY DATA SHEET
PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Product number MCC-PW210A, MCC-PW2105

Recommended use of the chemical and restrictions on use

Application Cleaning agent.

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier MicroCare LLC
Tel: +1 860-827-0626

Emergency telephone number

Emergency telephone INFOTRAC 1-800-535-5053 (U.S.A. and CANADA)
1-352-323-3500 (from anywhere in the world)

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336

Human health Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.

Environmental The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Not considered to be a significant hazard due to the small quantities used. Gas or vapor displaces oxygen available for breathing (asphyxiant).

Label elements

Hazard symbols

Signal word Warning

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Hazard statements

H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P261 Avoid breathing spray.
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a poison center/ doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information

EUH210 Safety data sheet available on request. RCH001a For use in industrial installations only.

Contains

trans-1,2-DICHLOROETHYLENE

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

trans-1,2-DICHLOROETHYLENE **30-60%**

CAS number: 156-60-5

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H332
Eye Irrit. 2A - H319
STOT SE 3 - H336
Not relevant.

HFC-134a Tetrafluoroethane **10-30%**

CAS number: 811-97-2

Classification
Press. Gas, Liquefied - H280
Simple Asphyxiant - USH03

1,1,1,2,2,3,4,5,5,5-decafluoropentane **10-30%**

CAS number: 138495-42-8

Classification
Not relevant.

The full text for all hazard statements is displayed in Section 16.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Composition comments	TSCA: The ingredients of this product are on the TSCA Inventory. The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200
Ingredient notes	A MIXTURE OF: (R,R)-1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE, (S,S)-1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE has been revised to 1,1,1,2,2,3,4,5,5,5-decafluoropentane. No change in chemistry. 20JUL17

Composition

4. First-aid measures

Description of first aid measures

General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin Contact	Rinse with water.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Headache. Exhaustion and weakness.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. May cause discomfort.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Flammability Class	The product is not flammable.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Specific hazards

Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. This product is toxic.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Evacuate area. Risk of explosion.

Environmental precautions

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapors and spray/mists.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F.

Storage class Miscellaneous hazardous material storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

Reference to other sections. Store away from incompatible materials (see Section 10).

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

trans-1,2-DICHLOROETHYLENE

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 793 mg/m³

HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES 4240 mg/m³

1,1,1,2,2,3,4,5,5,5-decafluoropentane

No information available that would effect occupational exposure limit values.
ACGIH = American Conference of Governmental Industrial Hygienists.

Ingredient comments ACGIH = US Standard.

Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection No specific hand protection recommended. Avoid contact with skin.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.
Environmental exposure controls	Keep container tightly sealed when not in use. 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

Information on basic physical and chemical properties

Appearance	Clear liquid. Aerosol.
Color	Colorless.
Odor	Slight. Ether.
Odor threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	39°C/102°F @ 101.3 kPa
Flash point	The product is not flammable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 13 %(V) Lower flammable/explosive limit: 5.5 %(V)
Other flammability	The product is not flammable. Aerosol ignition distance: none at 0.0 cm
Vapor pressure	55.3 kPa @ 25°C
Vapor density	3.7
Relative density	1.27
Bulk density	No information available.
Solubility(ies)	0.3 g/100 g water @ 20°C Slightly soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Oxidizing properties	Not known.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Comments	Aerosol.
Global Warming Potential (GWP)	
Surface tension	
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	100%
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	This product contains a maximum VOC content of 1080 g/l.
Heat of vaporization (at boiling point), cal/g (Btu/lb)	

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Acute Tox. 4 - H332 Harmful if inhaled.
ATE inhalation (vapours mg/l)	19.05

Skin corrosion/irritation

Animal data	Based on available data the classification criteria are not met.

Serious eye damage/irritation

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Serious eye damage/irritation	Based on available data the classification criteria are not met.

Respiratory sensitization

Respiratory sensitization	Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization	Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Headache. Exhaustion and weakness.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur.
Skin Contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. May cause discomfort.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
Medical Symptoms	Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

Toxicological information on ingredients.

trans-1,2-DICHLOROETHYLENE

Other health effects	There is no evidence that the product can cause cancer.

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	7,902.0
Species	Rat

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

ATE oral (mg/kg)	7,902.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE dermal (mg/kg)	5,000.0
Acute toxicity - inhalation	
ATE inhalation (vapours mg/l)	11.0
Skin corrosion/irritation	
Skin corrosion/irritation	Prolonged and frequent contact may cause redness and irritation.
Animal data	Slightly irritating. Rabbit
Serious eye damage/irritation	
Serious eye damage/irritation	Supplier's information. Rabbit 500 mg 24 hours Causes mild skin irritation.
Respiratory sensitization	
Respiratory sensitization	No specific test data are available.
Skin sensitization	
Skin sensitization	No specific test data are available.
Germ cell mutagenicity	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.
Carcinogenicity	
Carcinogenicity	No specific test data are available.
Specific target organ toxicity - single exposure	
STOT - single exposure	NOAEL Not available.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	NOAEL 16 mg/l, 90 days
Target organs	Endocrine system Liver Kidneys Bladder Respiratory tract

HFC-134a Tetrafluoroethane

Other health effects	There is no evidence that the product can cause cancer.
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} gases ppmV)	567,000.0
Species	Rat
ATE inhalation (gases ppm)	567,000.0

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Inhalation	Vapors irritate the respiratory system. May cause coughing and difficulties in breathing.
Ingestion	May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
Skin Contact	May cause allergic contact eczema. Contact with liquid form may cause frostbite.
Eye contact	May cause temporary eye irritation.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE dermal (mg/kg)	5,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	114.0
Species	Rat
ATE inhalation (vapours mg/l)	114.0
Skin corrosion/irritation	
Animal data	Not irritating. Rabbit
Human skin model test	Data lacking.
Extreme pH	Not applicable. Not corrosive to skin.
Serious eye damage/irritation	
Serious eye damage/irritation	Not irritating. Rabbit
Respiratory sensitization	
Respiratory sensitization	Data lacking.
Skin sensitization	
Skin sensitization	Not sensitizing. - Guinea pig: Not sensitizing.
Germ cell mutagenicity	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Carcinogenicity

Carcinogenicity	Does not contain any substances known to be carcinogenic.
IARC carcinogenicity	Not listed.
NTP carcinogenicity	Not listed.
OSHA Carcinogenicity	Not listed.

Reproductive toxicity

Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.

Skin Contact	Skin irritation should not occur when used as recommended. May cause defatting of the skin but is not an irritant.
Eye contact	May cause eye irritation.
Acute and chronic health hazards	There is no evidence that the product can cause cancer.

12. Ecological information

Ecological information on ingredients.

trans-1,2-DICHLOROETHYLENE

Ecotoxicity	Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Ecotoxicity	It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnies.

Toxicity Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

trans-1,2-DICHLOROETHYLENE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 135 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 220 mg/l, Daphnia magna
Acute toxicity - aquatic plants	LC_{50}, 72 hours: 36.36 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 48 hours: 110,000 mg/l, Daphnia magna

HFC-134a Tetrafluoroethane

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 450 mg/l, Fish

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 980 mg/l, Daphnia magna

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 13.9 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LC_{50}, 48 hours: 11.7 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >120 mg/l, Algae

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

trans-1,2-DICHLOROETHYLENE

Biodegradation	Not readily biodegradable. Method: OECD Test Guideline 301D

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

trans-1,2-DICHLOROETHYLENE

Bio-Accumulative Potential	Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
Partition coefficient	log Pow: 2.06

HFC-134a Tetrafluoroethane

Partition coefficient	Pow: 1.06

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Bio-Accumulative Potential	Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
Partition coefficient	Pow: 2.7

Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

trans-1,2-DICHLOROETHYLENE

Mobility	The product has poor water-solubility.

Other adverse effects

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents.

14. Transport information

UN Number

UN No. (IMDG) 1950

UN No. (ICAO) 1950

UN proper shipping name

Proper shipping name (TDG) LIMITED QUANTITY

Proper shipping name (IMDG) UN1950 AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY

Proper shipping name (ICAO) UN1950 AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY

Proper shipping name (DOT) LIMITED QUANTITY

Transport hazard class(es)

IMDG Class 2.2 LIMITED QUANTITY

ICAO class/division 2.2 LIMITED QUANTITY

ICAO subsidiary risk N/A

Packing group

IMDG packing group N/A

ICAO packing group N/A

Special precautions for user

EmS F-C, S-V

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. No information required.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed or exempt:

trans-1,2-DICHLOROETHYLENE
Final CERCLA RQ: 1000(454) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
None of the ingredients are listed or exempt.

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
The following ingredients are listed or exempt:

trans-1,2-DICHLOROETHYLENE

Massachusetts "Right To Know" List
The following ingredients are listed or exempt:

trans-1,2-DICHLOROETHYLENE

Rhode Island "Right To Know" List
None of the ingredients are listed or exempt.

Minnesota "Right To Know" List
The following ingredients are listed or exempt:

HFC-134a Tetrafluoroethane

New Jersey "Right To Know" List
None of the ingredients are listed or exempt.

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

trans-1,2-DICHLOROETHYLENE

Inventories

Canada - DSL/NDSL

DSL

US - TSCA

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Present.
1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE (CAS# 138495-42-8) is controlled by TSCA Section 5, Significant New Use Rule
(SNUR; 40 CFR 721.5645) The approved uses are: precision and general cleaning, carrier fluid, displacement drying, printed circuit board cleaning, particulate removal and film cleaning, process medium, heat transfer fluid (dielectric and non-dielectric), and test fluid. Processors and users of this substance must also comply with the applicable general SNUR requirements set forth in 40 CFR 721 subpart A, including export notification requirements if applicable (40 CFR 721.20), and the applicable record keeping requirements set forth at 40 CFR 721.125.
1,1,1,2,2,3,4,5,5,5-Decafluoropentane 138495-42-8
The United States Environmental Protection Agency (USEPA) has established a Significant New Use Rule (SNUR) for one of the components in this product. This material contains one or more substances which requires export notification under TSCA Section 12(b) and 40 CFR Part 707 Subpart D:

trans-1,2-DICHLOROETHYLENE

Present.

HFC-134a Tetrafluoroethane

Present.

US - TSCA 12(b) Export Notification

1,1,1,2,2,3,4,5,5,5-decafluoropentane

trans-1,2-DICHLOROETHYLENE

Philippines - PICCS

Not listed.

Taiwan - TCSI

Not listed.

New Zealand - NZIOC

Not listed.

16. Other information

PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL

Abbreviations and acronyms used in the safety data sheet	TDG: The transport of dangerous goods act IATA: International air transport association. ICAO: Technical instructions for the safe transport of dangerous goods by air. IMDG: International maritime dangerous goods. CAS: Chemical abstracts service. ATE: Acute toxicity estimate. LC_{50}: Lethal concentration to 50 % of a test population. LD_{50}: Lethal dose to 50% of a test population (median lethal dose). EC_{50}: 50% of maximal effective concentration. PBT: Persistent, bioaccumulative and toxic substance. vPvB: Very persistent and very bioaccumulative.
Classification abbreviations and acronyms	Aerosol = Aerosol Acute Tox. = Acute toxicity Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Training advice	Only trained personnel should use this material.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	6/1/2021
Revision	72
Supersedes date	5/21/2021
SDS No.	AEROSOL - PW210A
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. USH03 May displace oxygen and cause rapid suffocation