# **TECHNI-PRO**

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

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

d The Hiller	
1. Identification	
Product identifier	
Product name	PW2 - LEAD-FREE FLUX REMOVER - POWERCLEAN, AEROSOL
Product number	TNP-LD-FRE-FLX-RM
Recommended use of the che	mical and restrictions on use
Application	Cleaning agent.
Uses advised against	No specific uses advised against are identified.
Details of the supplier of the s	afety data sheet
Supplier	TestEquity Tel: 800-950-3457 6100 Condor Drive Moorpark, CA 93021
Emergency telephone number	r
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	e or mixture
OSHA Regulatory Status	This Product is Hazardous under the OSHA Hazard Communication Standard.
Physical hazards	Not Classified
Physical hazards Health hazards	Not Classified Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336
-	
Health hazards	Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336 Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild
Health hazards Human health	Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336 Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash. The product contains a substance which is harmful to aquatic organisms and which may
Health hazards Human health Environmental	<ul> <li>Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336</li> <li>Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.</li> <li>The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.</li> <li>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</li> </ul>
Health hazards Human health Environmental Physicochemical	<ul> <li>Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336</li> <li>Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.</li> <li>The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.</li> <li>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</li> </ul>

Signal word

Warning

Hazard statements	H332 Harmful if inhaled. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	<ul> <li>P261 Avoid breathing spray.</li> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</li> <li>P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact</li> <li>lenses, if present and easy to do. Continue rinsing.</li> <li>P312 Call a poison center/ doctor if you feel unwell.</li> <li>P337+P313 If eye irritation persists: Get medical advice/ attention.</li> <li>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 Store locked up.</li> <li>P501 Dispose of contents/ container in accordance with national regulations.</li> </ul>
Supplemental label information	EUH210 Safety data sheet available on request. RCH001a For use in industrial installations only.
Contains	trans-1,2-DICHLOROETHYLENE
Other hazards	

### Other hazards

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

#### 3. Composition/information on ingredients

#### Mixtures

### trans-1,2-DICHLOROETHYLENE

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

CAS number: 811-97-2

### Classification

Press. Gas, Liquefied - H280 Simple Asphyxiant - USH03

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

CAS number: 138495-42-8

### Classification

Not relevant.

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

10-30%

30-60%

#### 10-30%

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 medi	cal 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.

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 measure	25
Personal precautions, protection	ve 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 cont	ainment 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

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, inc	cluding 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/m<sup>3</sup>

### HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES 4240 mg/m<sup>3</sup>

### 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.

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 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.
pН	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	e No information available.
Viscosity	No information available.
Explosive properties	No information available.
Oxidizing properties	Not known.

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)	9
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.
Dessibility of borowdows	No notontially bozordaya reactions (nown

Possibility of hazardous No potentially hazardous reactions known.

- Conditions to avoidAvoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised<br/>container: may burst if heated
- Materials to avoidNo specific material or group of materials is likely to react with the product to produce a<br/>hazardous situation.
- Hazardous decomposition<br/>productsDoes not decompose when used and stored as recommended. Thermal decomposition or<br/>combustion products may include the following substances: Toxic gases or vapors.

11. Toxicological information

reactions

Information on toxicological effects		
Acute toxicity - oral		
Notes (oral LD50)	Based on available data the classification criteria are not met.	
Acute toxicity - dermal		
Notes (dermal LD50)	Based on available data the classification criteria are not met.	
Acute toxicity - inhalation		
Notes (inhalation LC50)	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 eve damage/irritat	tion	

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.
<u>Skin sensitization</u> Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u> Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u> Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u> Reproductive toxicity - ferti	lity 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.
<u> Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	7,902.0
Species	Rat

ATE oral (mg/kg)	7,902.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ 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	<u>on</u>
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.
<b>Carcinogenicity</b>	
Carcinogenicity	No specific test data are available.
Specific target organ toxicit	<u>y - single exposure</u>
STOT - single exposure	NOAEL Not available.
Specific target organ toxicit	
STOT - repeated exposure	e 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	<u>on</u>
Acute toxicity inhalation (LC50 gases ppmV)	567,000.0
Species	Rat
ATE inhalation (gases ppm)	567,000.0

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 (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
Acute toxicity - dermal	
Acute toxicity dermal (LD50 mg/kg)	5,000.0
Species	Rat
ATE dermal (mg/kg)	5,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC50 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.
<u>Serious eye damage/irri</u>	tation
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.

	<u>Carcinogenicity</u>	
	Carcinogenicity	Does not contain any substances known to be carcinogenic.
	IARC carcinogenicity	Not listed.
	NTP carcinogenicity	Not listed.
	OSHA Carcinogenicity	Not listed.
	<u>Reproductive toxicity</u>	
	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. Ecologi	cal information	
<u>Ecological i</u>	nformation 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.
<b>Ecologica</b>	l information on ingredien	<u>its.</u>
		trans-1,2-DICHLOROETHYLENE
	Acute aquatic toxicity	
	Acute toxicity - fish	LC₅₀, 96 hours: 135 mg/l, Fish
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 220 mg/l, Daphnia magna
	Acute toxicity - aquatic plants	LC₅₀, 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 - aquatic invertebrates	EC₅₀, 48 hours: 980 mg/l, Daphnia magna
		<u>1,1,1,2,2,3,4,5,5,5-decafluoropentane</u>
	Acute aquatic toxicity	
	Acute toxicity - fish	LC₅₀, 96 hours: 13.9 mg/l, Oncorhynchus mykiss (Rainbow trout)
	Acute toxicity - aquatic invertebrates	LC₅₀, 48 hours: 11.7 mg/l, Daphnia magna
	Acute toxicity - aquatic plants	EC₅₀, 72 hours: >120 mg/l, Algae
Persistence	and degradability	
Persistenc	<b>e and degradability</b> The de	gradability of the product is not known.
<u>Ecologica</u>	l information on ingredier	<u>nts.</u>
		trans-1,2-DICHLOROETHYLENE
	Biodegradation	Not readily biodegradable. Method: OECD Test Guideline 301D
	ative potential	
		available on bioaccumulation.
Partition co		mation available.
<u>Ecological i</u>	nformation on ingredients.	
		trans-1,2-DICHLOROETHYLENE
	Bio-Accumulative Potent	tial 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 Potent	tial Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
	Partition coefficient	Pow: 2.7
<u>Mobility i</u>	<u>n soi</u> l	
Mobility	The pro surface	duct contains volatile organic compounds (VOCs) which will evaporate easily from all s.
Ecological information on ingredients.		
		trans-1,2-DICHLOROETHYLENE
	Mobility	The product has poor water-solubility.
<u>Other adve</u>	rse effects	

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	
<u>UN Number</u>	
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN proper shipping name	
Proper shipping name (TDG)	LIMITED QUANTITY
Proper shipping name (IMD	G) UN1950 AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY
Proper shipping name (ICA)	D) 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.

#### 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.

#### 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
	<ul> <li>IATA: International air transport association.</li> <li>ICAO: Technical instructions for the safe transport of dangerous goods by air.</li> <li>IMDG: International maritime dangerous goods.</li> <li>CAS: Chemical abstracts service.</li> <li>ATE: Acute toxicity estimate.</li> <li>LC<sub>50</sub>: Lethal concentration to 50 % of a test population.</li> <li>LD<sub>50</sub>: Lethal dose to 50% of a test population (median lethal dose).</li> <li>EC<sub>50</sub>: 50% of maximal effective concentration.</li> <li>PBT: Persistent, bioaccumulative and toxic substance.</li> <li>vPvB: Very persistent and very bioaccumulative.</li> </ul>
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

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.