SAFETY DATA SHEET.

Issuing date 11-Nov-2015 **Revision Date** 04-Jun-2021 **Version** 1.03

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name PC-100-12C POWER CLEAN

Recommended use of the chemical and restrictions on use

Product Type Non-flammable aerosol

Synonyms None

Supplier's details

Recommended Use Mold Cleaner.

Uses advised against **No information available**

Manufacturer:
Nanoplas Inc.
2950 Prairie St. SW, Suite 900
Grandville, MI 49418
NANOPLAS (616)-452-3707

Emergency telephone number

Chemical Emergency Phone Number CHEMTREC: 1-800-262-8200 ID 1195 (UNITED STATES)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing genetic defects
Suspected of causing cancer.
May cause respiratory irritation. May cause drowsiness or dizziness.
Contains gas under pressure; may explode if heated

Appearance Clear **Physical state** Aerosol **Odor** Solvent

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.
Wash face, hands and any exposed skin thoroughly after handling.
Avoid breathing fumes, gas, mist, vapors, spray.
Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response
If exposed or concerned: Call a poison center, doctor.
Specific treatment (see first aid on this label).
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, attention
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice, attention.
Take off contaminated clothing and wash it before reuse.
IF INHALED : Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor, physician if you feel unwell.

Precautionary Statements - Storage
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Protect from sunlight

Precautionary Statements - Disposal

Dispose of contents, container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
TRICHLOROETHYLENE	79-01-6	80-90
ISOPROPYL ALCOHOL	67-63-0	1-10
CARBON DIOXIDE	124-38-9	1-10
1,2-BUTYLENE OXIDE	106-88-7	<1

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas.

Eye contact Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor.

Skin contact Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.

Ingestion Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Protection of First-aiders Remove all sources of ignition.

Most important symptoms/effects, acute and delayed

Main Symptoms Causes skin and serious eye irritation. Suspected of causing genetic defects. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog.Dry chemical. Foam.Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Keep away from sources of ignition - No smoking.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion Products Acrid smoke/fumes. Carbon oxides , Hydrocarbons, Fumes. Sulfur oxides.

Explosion Data

Sensitivity to Mechanical Impact none.
Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

In the event of fire and/or explosion do not breathe fumes. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventiliation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inter, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly . After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
TRICHLOROETHYLENE 79-01-6	STEL: 25 ppm TWA: 10 ppm	TWA: 100 ppm (vacated) TWA: 50 ppm (vacated) TWA: 270 mg/m³ (vacated) STEL: 200 ppm (vacated) STEL: 1080 mg/m³ Ceiling: 200 ppm	IDLH: 1000 ppm
ISOPROPYL ALCOHOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³
CARBON DIOXIDE 124-38-9	STEL: 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m³ (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m³ (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m³	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m³ STEL: 30000 ppm STEL: 54000 mg/m³

ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits. Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Aerosol		
Appearance	Clear	**Odor**	Solvent
Color	Clear	**Odor Threshold**	

Property	**Values**	**Remarks • Methods**
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	12 °C / 54 °F	Closed cup (based on components)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		

Specific Gravity	1.362	
Water solubility	Negligible	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	Not applicable
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%) 95.43

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions — No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause respiratory irritation, May cause drowsiness or dizziness.

Eye contact Causes serious eye irritation.

Skin contact Causes skin irritation.

Ingestion May be harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TRICHLOROETHYLENE 79-01-6	= 4920 mg/kg (Rat)	= 29000 mg/kg (Rabbit)	= 26 mg/L (Rat) 4 h
ISOPROPYL ALCOHOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m³ (Rat) 4 h
1,2-BUTYLENE OXIDE 106-88-7	= 900 mg/kg (Rat)	1255 - 2546 mg/kg (Rabbit)	> 6300 mg/m³ (Rat) 4 h

Information on toxicological effects

Symptoms Causes skin and serious eye irritation. Suspected of causing genetic defects. Suspected of causing cancer. May cause drowsiness or dizziness. May cause respiratory irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Irritating to eyes.
Sensitization Not a known sensitizer.
Germ cell mutagenicity Suspected of causing genetic defects.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TRICHLOROETHYLENE 79-01-6	A2	Group 2A	Known	X
1,2-BUTYLENE OXIDE 106-88-7	-	Group 2B	-	X

ACGIH: (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
Group 2A - Probably Carcinogenic to Humans
NTP: (National Toxicity Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
Known - Known Carcinogen
OSHA: (Occupational Safety & Health Administration)
X - Present

Reproductive toxicity Product is or contains a chemical which is a known or suspected reproductive hazard.
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ systemic toxicity (repeated exposure) No known effect based on information supplied.

Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
Target Organ Effects Skin, Eyes, Respiratory System, and Central Nervous System.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (dermal) 89955 mg/kg
ATEmix (inhalation-dust/mist) 284.3 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
TRICHLOROETHYLENE 79-01-6	175 mg/L EC50 Pseudokirchneriella subcapitata 96h 450 mg/L EC50 Desmodesmus subspicatus 96h	31.4 - 71.8 mg/L LC50 Pimephales promelas 96h flow-through 39 - 54 mg/L LC50 Lepomis macrochirus 96h static	-	2.2 mg/L EC50 Daphnia magna 48h
ISOPROPYL ALCOHOL 67-63-0	1000 mg/L EC50 Desmodesmus subspicatus 72h 1000 mg/L EC50 Desmodesmus subspicatus 96h	11130 mg/L LC50 Pimephales promelas 96h static 9640 mg/L LC50 Pimephales promelas 96h flow-through 1400000 µg/L LC50 Lepomis macrochirus 96h	-	13299 mg/L EC50 Daphnia magna 48h
CARBON DIOXIDE 124-38-9	-	0.46 mg/L LC50 Oncorhynchus mykiss	-	-

1,2-BUTYLENE OXIDE 106-88-7	500 mg/L EC50 Desmodesmus subspicatus 72h	-	-	69.8 mg/L EC50 Daphnia magna 48h

Persistence and degradability

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Bioaccumulation

Chemical Name	log Pow
TRICHLOROETHYLENE 79-01-6	2.4
ISOPROPYL ALCOHOL 67-63-0	0.05
1,2-BUTYLENE OXIDE 106-88-7	0.416

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with local regulations. Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Pressurized container: Do not pierce or burn, even after use.

14. TRANSPORT INFORMATION

DOT Ground LIMITED QUANTITY

IATA UN1950, AEROSOLS, NON-FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III, 2.2 (6.1), LTD. QTY

IMDG UN1950, AEROSOLS, 2.2,LTD. QTY. UN1950, AEROSOLS, NON-FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III, 2.2 (6.1), LTD. QTY

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
TRICHLOROETHYLENE	X	X	X	X	X	X	X	X
ISOPROPYL ALCOHOL	X	X	X	X	X	X	X	X

CARBON DIOXIDE	X	X	X	X	X	X	X	X
1,2-BUTYLENE OXIDE	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
TRICHLOROETHYLENE - 79-01-6	79-01-6	80-90	0.1
ISOPROPYL ALCOHOL - 67-63-0	67-63-0	1-10	1.0
1,2-BUTYLENE OXIDE - 106-88-7	106-88-7	<1	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Clean Water Act

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TRICHLOROETHYLENE 79-01-6	100 lb	X	X	X

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
TRICHLOROETHYLENE 79-01-6	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
1,2-BUTYLENE OXIDE 106-88-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65
TRICHLOROETHYLENE - 79-01-6	Carcinogen Developmental, Male 80-90%

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
TRICHLOROETHYLENE 79-01-6	X	X	X
ISOPROPYL ALCOHOL 67-63-0	X	X	X
CARBON DIOXIDE 124-38-9	X	X	X
1,2-BUTYLENE OXIDE 106-88-7	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

NFPA **Health Hazard** 2 **Flammability** 1 **Instability** 0 **Physical and chemical hazards** -

HMIS **Health Hazard** 2* **Flammability** 1 **Physical Hazard** 1 **Personal protection** B

Chronic Hazard Star Legend *Chronic Health Star Hazard Repeated or prolonged exposure may cause central nervous system damage Chlorinated solvents. Severe overexposure may cause liver or kidney damage.*

Prepared By

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Revision Note
1 (M)SDS sections updated

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet