QUALITROL

ATTN: Ken Rainis, Perinton Conservation Board Chair
1350 Turk Hill Road, Fairport NY, 14450

March 10, 2026

RE: Summary of Chemical Usage & Handling at Qualitrol Corporation, Fairport NY

Dear Mr. Rainis,

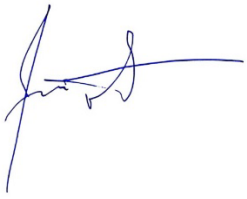
The Qualitrol site in Fairport NY uses, stores, and disposes of a variety of chemicals[1] in our building in compliance with all applicable federal, state, and local laws, regulations, and ordinances. When not in use, all chemicals are properly stored in a designated chemical room specifically designed for spill containment that comports with all applicable laws.

Furthermore, Qualitrol maintains a robust internal Chemical Spill Response Procedure that clearly defines safe, consistent steps for responding to an unlikely chemical spill, which not only complies with all applicable laws, but is designed to protect its employees and contractors, as well as the surrounding community – inclusive of its residents, their property, and the environment.

[1] · The five most commonly used chemicals on site are Gardoclean 2500, Gardacid P 4298, Chemeon TCP – HF, Aerotron 100, and Powdura. Trichloroisocyanuric acid is not used in our processes or building. In addition, IntelliPack SmartFoam B is regularly used for protective packaging purposes. The MSDS associated with these chemicals are attached to this correspondence.

Sincerely,

Jim Niederst, Vice President Operations



We create chemistry

Safety Data Sheet
Gardoclean 2500

1. Identification

Product identifier used on the label

Gardoclean 2500

Recommended use of the chemical and restriction on use

Recommended use*: Detergents
Recommended use*: Detergents; Restricted to professional users.
Unsuitable for use: Uses other than recommended

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: inorganic compounds, organic compounds

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Repr.	1 (unborn child, fertility)	Reproductive toxicity

Aquatic Acute	3	Hazardous to the aquatic environment - acute

Label elements

Pictogram:

Signal Word:
Danger

Hazard Statement:

H318	Causes serious eye damage.
H360	May damage fertility. May damage the unborn child.
H402	Harmful to aquatic life.

Precautionary Statements (Prevention):

P201	Obtain special instructions before use.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P202	Do not handle until all safety precautions have been read and understood.
P273	Avoid release to the environment.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P308 + P313	IF exposed or concerned: Get medical attention.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

sodium carbonate
CAS Number: 497-19-8
Content (W/W): >= 25.0 - < 50.0%
Synonym: Carbonic acid, disodium salt

Disodium tetraborate pentahydrate
CAS Number: 12179-04-3
Content (W/W): >= 20.0 - < 25.0%
Synonym: No data available.

Tetrasodium-pyrophosphate
CAS Number: 7722-88-5
Content (W/W): >= 10.0 - < 15.0%
Synonym: No data available.

Alcohols, C10-16, ethoxylated propoxylated
CAS Number: 69227-22-1
Content (W/W): >= 3.0 - < 5.0%
Synonym: No data available.

Butyl diglycol
CAS Number: 112-34-5
Content (W/W): >= 1.0 - < 3.0%
Synonym: Butylcarbitol

Nonylphenol Ethoxylate, Branched
CAS Number: 68412-54-4
Content (W/W): >= 1.0 - < 3.0%
Synonym: H402-412; No-Longer Polymers (NLP)

Nonylphenol polyethylene glycol ether
CAS Number: 127087-87-0
Content (W/W): >= 1.0 - < 3.0%
Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:
Keep warm, calm and covered up. Never give anything by mouth to an unconscious person. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product. Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

If inhaled:
Immediate medical attention required. Remove the affected individual into fresh air and keep the person calm. If breathing is irregular or stopped, administer artificial respiration.

If on skin:
If symptoms persist, seek medical advice. Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvents or thinners.

If in eyes:
Remove contact lenses, if present. Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required.

If swallowed:
Do not induce vomiting. Rinse mouth thoroughly with water, seek medical attention. If adverse health effects develop seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Information on: Butyl diglycol
Symptoms: Overexposure may cause:, cyanosis, acidosis, hypotension (low blood pressure), irregular breathing

Information on: sodium carbonate
Symptoms: Overexposure may cause:, vomiting, circulatory collapse, death, diarrhea

Information on: Tetrasodium-pyrophosphate
Symptoms: Overexposure may cause:, corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps
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Hazards: Dusts may cause mechanical irritation to eyes.

Indication of any immediate medical attention and special treatment needed

Note to physician

Antidote:	No known specific antidote.
Treatment:	Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon oxides, phosphorus oxides, sulfur oxides
Fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

Advice for fire-fighters

Protective equipment for fire-fighting:
Appropriate breathing apparatus may be required.

Further information:
Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire

extinguishing method of surrounding areas must be considered. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Do not inhale dusts. For non-emergency personnel: Use personal protective clothing. Ensure adequate ventilation. Keep away from sources of ignition. For emergency responders: Advice on product handling can be found in sections 7 and 8 of this safety data sheet. Information regarding personal protective measures, see section 8.

Environmental precautions
Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

Methods and material for containment and cleaning up
Avoid dust formation. Contain and collect mechanically and dispose of in accordance with local regulations. Ensure adequate ventilation.

7. Handling and Storage

Precautions for safe handling
Avoid dust formation. Protect against moisture. Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:
Avoid dust formation. Avoid all sources of ignition: heat, sparks, open flame. The relevant fire protection measures should be noted.

Conditions for safe storage, including any incompatibilities
Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyethylenetherephtalate (PET), Polypropylene (PP)

Further information on storage conditions: Keep container dry. Keep in a cool, well-ventilated place. Protect against moisture. Avoid direct sunlight. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions.

Storage stability:
Storage temperature: < 40 °C

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:
Respiratory protection required if exposure limit (if available) may be exceeded

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1), chloroprene rubber (CR) - 0.5 mm coating thickness, nitrile rubber (NBR) - 0.4 mm coating thickness, butyl rubber (butyl) - 0.7 mm coating thickness, Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1, The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties)., The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Eye protection:
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:
Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

General safety and hygiene measures:
Eye wash fountains and safety showers must be easily accessible. Avoid inhalation of dusts. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

9. Physical and Chemical Properties

Form:	powder
Odour:	No data available.
Odour threshold:	No applicable information available.
Colour:	off-white
pH value:	9.0 - 10.0 (40 g/l, 20 °C)
Melting point:	not determined
Freezing point:	not determined
Boiling range:	not determined
onset of boiling:	Study technically not feasible.
Sublimation point:	No applicable information available.
Flash point:	not applicable, the product is a solid
Flammability:	not flammable
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Autoignition:	not applicable, the product is a solid
Vapour pressure:	(20 °C) The product is a non-volatile solid.
Relative density:	No applicable information available.
Bulk density:	62.84 kg/m3
Vapour density:	The product is a non-volatile solid.
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures

Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	No applicable information available.
Viscosity, kinematic:	(20 °C) not applicable
Solubility in water:	90 g/l (71 °C)
Miscibility with water:	miscible
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Molar mass:	No applicable information available.
Evaporation rate:	No applicable information available.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
Dust can form an explosive mixture with air.

Conditions to avoid
Avoid dust formation. Avoid direct sunlight. Avoid humidity.

Incompatible materials
Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

Hazardous decomposition products

Decomposition products:
When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Based on available data, the classification criteria are not met.

Oral
Type of value: ATE
Value: 3,447 mg/kg
The product has not been tested. The statement has been derived from the properties of the individual components.

Inhalation
Type of value: ATE
Value: > 20 mg/l
The product has not been tested. The statement has been derived from the properties of the individual components.

Dermal
Type of value: ATE
Value: > 2,000 mg/kg
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment other acute effects
Assessment of STOT single:
Based on available data, the classification criteria are not met.

Irritation / corrosion
Assessment of irritating effects: May cause severe damage to the eyes.

Information on: Butyl diglycol
Assessment of irritating effects: Eye contact causes irritation. May cause slight irritation to the skin.

Information on: sodium carbonate
Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation.

Information on: Disodium tetraborate pentahydrate
Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation.

Sensitization
Assessment of sensitization: Based on available data, the classification criteria are not met.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Based on available data, the classification criteria are not met.

Genetic toxicity
Assessment of mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity
Assessment of carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity
Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals.

Information on: Disodium tetraborate pentahydrate
Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Teratogenicity
Assessment of teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals.

Information on: Disodium tetraborate pentahydrate
Assessment of teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other Information
The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Harmful to aquatic life. There are no test results available for this product. Do not allow to enter drains or waterways.

Persistence and degradability

Assessment biodegradation and elimination (H2O)
No data available concerning biodegradation and elimination.

Bioaccumulative potential

Bioaccumulation potential
No data available.

Mobility in soil

Assessment transport between environmental compartments
No data available.

13. Disposal considerations

Waste disposal of substance:
Do not discharge into drains/surface waters/groundwater. Observe national and local legal requirements.

Container disposal:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

EPCRA 313:

CAS Number	Chemical name
68412-54-4	Nonylphenol Ethoxylate, Branched
127087-87-0	Nonylphenol polyethylene glycol ether
112-34-5	Butyl diglycol

State regulations

State RTK	CAS Number	Chemical name
NJ	7722-88-5	Tetrasodium-pyrophosphate
PA	112-34-5	Butyl diglycol
	7757-82-6	Sodium sulphate
	7722-88-5	Tetrasodium-pyrophosphate
	1330-43-4	Boron sodium oxide (B4Na2O7)

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:
Health: 3 Fire: 0 Reactivity: 1 Special:

HMIS III rating

Health: 3¤ Flammability: 0 Physical hazard: 1

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2023/02/17

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. Restricted to professional users.

END OF DATA SHEET

We create chemistry

Safety Data Sheet
Gardacid P 4298

1. Identification

Product identifier used on the label

Gardacid P 4298

Recommended use of the chemical and restriction on use

Recommended use*: Detergents
Unsuitable for use: Uses other than recommended

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: inorganic, aqueous solution

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	3 (oral)	Acute toxicity
Acute Tox.	2 (dermal)	Acute toxicity
Acute Tox.	4 (Inhalation - vapour)	Acute toxicity
Skin Corr./Irrit.	1	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Met. Corr.	1	Corrosive to metals

Label elements

Pictogram:

Signal Word:
Danger

Hazard Statement:

H314	Causes severe skin burns and eye damage.
H310	Fatal in contact with skin.
H332	Harmful if inhaled.
H301	Toxic if swallowed.
H290	May be corrosive to metals.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P260	Do not breathe dust or mist.
P270	Do not eat, drink or smoke when using this product.
P262	Do not get in eyes, on skin, or on clothing.
P234	Keep only in original packaging.
P264	Wash contaminated body parts thoroughly after handling.
P261	Avoid breathing mist or vapour or spray.
P261	Avoid breathing dust or fume.

Precautionary Statements (Response):

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER or physician.
P361	Take off immediately all contaminated clothing.
P330	Rinse mouth.
P322	Specific measures (see on this label).
P321	Specific treatment (see on this label).
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.

Precautionary Statements (Storage):

P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Hydrofluoric acid
CAS Number: 7664-39-3
Content (W/W): >= 3.0 - < 5.0%
Synonym: No data available.

Sulphuric acid
CAS Number: 7664-93-9
Content (W/W): >= 10.0 - < 15.0%
Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:
Immediately remove contaminated clothing. Remove affected person from danger area. Keep warm, calm and covered up. First aid personnel should pay attention to their own safety. Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident. Show container, label and/or safety data sheet to physician.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. If breathing is irregular or stopped, administer artificial respiration.

If on skin:
Remove contaminated clothing immediately and clean before re-use or dispose it if necessary. Flush with copious amounts of water for at least 15 minutes. Apply calcium gluconate gel. Immediate medical attention required.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required. Remove contact lenses, if present.

If swallowed:
Immediately rinse mouth and then drink milk or a magnesium hydroxide/calcium carbonate suspension, do not induce vomiting, seek medical attention. Do not induce vomiting. Summon medical aid without delay.

Most important symptoms and effects, both acute and delayed

Information on: Hydrofluoric acid
Symptoms: Overexposure may cause:, corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: Sulphuric acid
Symptoms: Overexposure may cause:, respiratory disorders, coughing
---
Hazards: Symptoms of poisoning may only appear after several hours. May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach.

Indication of any immediate medical attention and special treatment needed

Note to physician
Antidote: Administration of calcium gluconate.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
carbon dioxide, dry powder, alcohol-resistant foam, water spray

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
fluorinated compounds, sulfur oxides

Advice for fire-fighters
Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

Further information:
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Cool endangered containers with water-spray.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Use personal protective clothing. Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

Environmental precautions
Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Methods and material for containment and cleaning up
For large amounts: Use chemical neutralizing agents.

Ensure adequate ventilation. Pick up with inert absorbent material (e.g. sand, earth etc.). Take up mechanically and collect in suitable container (adequately labelled) for disposal.

7. Handling and Storage

Precautions for safe handling

Do not return residues to the storage containers. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with skin and eyes. Keep away from food, drink and animal feeding stuffs. Warn users about safety measures and precautions to prevent accidents.

Protection against fire and explosion:
Avoid all sources of ignition: heat, sparks, open flame. The relevant fire protection measures should be noted.

Conditions for safe storage, including any incompatibilities

Segregate from bases.

Suitable materials for containers: High density polyethylene (HDPE)

Suitable materials for containers: rubberized

Further information on storage conditions: The entrance to storage rooms is to be granted only to appropriately trained personnel. Keep only in the original container. Keep in a cool, well-ventilated place. Avoid direct sunlight. avoid contact with metals

Storage stability:
Storage duration: 24 Months

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Sulphuric acid	ACGIH, US:	TWA value 0.2 mg/m3 Thoracic fraction ;
	OSHA Z1:	PEL 1 mg/m3 ;

Advice on system design:
Use only in well-ventilated areas.

Personal protective equipment

Respiratory protection:
Self-contained breathing apparatus. Respiratory protection required if exposure limit (if available) may be exceeded

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1), Further information on penetration time is available from the manufacturer of the glove., The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties)., The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

polyvinylchloride (Pylox)

chloroprene rubber (Neoprene)

Eye protection:
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:
Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Eye wash fountains and safety showers must be easily accessible. Avoid contact with the skin, eyes and clothing. Take off immediately all contaminated clothing. Keep away from food, drink and animal feeding stuffs. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Form:	liquid
Odour:	No data available.
Odour threshold:	No applicable information available.
Colour:	colourless
pH value:	< 2.5
Freezing point:	not determined
Melting point:	-22 °C
Boiling range:	not determined
onset of boiling:	not determined
Sublimation point:	No applicable information available.
Flash point:	not applicable
Flammability:	No applicable information available.
Lower explosion limit:	not applicable
Upper explosion limit:	No applicable information available.
Vapour pressure:	(20 °C) not determined
Density:	1.105 g/cm3 (20 °C)
Relative density:	No applicable information available.
Vapour density:	No applicable information available.
Thermal decomposition:	No applicable information available.
Viscosity, dynamic:	No applicable information available.
Viscosity, kinematic:	6.0 mm2/s (20 °C)
Solubility in water:	No applicable information available.
Miscibility with water:	miscible
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Molar mass:	No applicable information available.
Evaporation rate:	No applicable information available.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
Corrosive effect on metals.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
Reacts with metals, with evolution of hydrogen.

Conditions to avoid
Avoid direct sunlight.

Incompatible materials
glass, metal, bases

Hazardous decomposition products

Decomposition products:
Possible decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
No applicable information available.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Of moderate toxicity after short-term inhalation. Of high toxicity after short-term skin contact. Of high toxicity after single ingestion.

Irritation / corrosion
Assessment of irritating effects: May cause severe damage to the eyes. May cause skin burns. Ingestion may cause corrosion of the gastrointestinal tract.

Sensitization
Assessment of sensitization: Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Based on available data, the classification criteria are not met.

Genetic toxicity
Assessment of mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity
Assessment of carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity
Assessment of reproduction toxicity: Based on available data, the classification criteria are not met.

Teratogenicity
Assessment of teratogenicity: Based on available data, the classification criteria are not met.

Other Information
The product has not been tested. The statement has been derived from the properties of the individual components.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Do not allow to enter drains or waterways.
The product has not been tested. Based on available data, the classification criteria are not met.

Persistence and degradability

Assessment biodegradation and elimination (H2O)
No data available concerning biodegradation and elimination.

Bioaccumulative potential

Bioaccumulation potential
No data available.

Mobility in soil

Assessment transport between environmental compartments
No data available.

13. Disposal considerations

Waste disposal of substance:
Observe national and local legal requirements.

14. Transport Information

Land transport
USDOT

Hazard class:	8
Packing group:	II
ID number:	UN 2922

Hazard label:	8, 6.1
Proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (contains Sulphuric acid, HYDROFLUORIC ACID)

Sea transport
IMDG

Hazard class:	8
Packing group:	II
ID number:	UN 2922
Hazard label:	8, 6.1
Marine pollutant:	NO
Proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (contains Sulphuric acid, HYDROFLUORIC ACID)

Air transport
IATA/ICAO

Hazard class:	8
Packing group:	II
ID number:	UN 2922
Hazard label:	8, 6.1
Proper shipping name:	CORROSIVE LIQUID, TOXIC, N.O.S. (contains Sulphuric acid, HYDROFLUORIC ACID)

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

EPCRA 313:

CAS Number	Chemical name
7664-39-3	Hydrofluoric acid
7664-93-9	Sulphuric acid

CERCLA RQ	CAS Number	Chemical name
1000 LBS	7664-93-9	Sulphuric acid
100 LBS	7664-39-3	Hydrofluoric acid

State regulations

State RTK	CAS Number	Chemical name
NJ	7664-93-9	Sulphuric acid
PA	7664-39-3	Hydrofluoric acid
	7664-93-9	Sulphuric acid

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACID, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:
Health: 3 Fire: 1 Reactivity: 1 Special:

HMIS III rating
Health: 3 Flammability: 1 Physical hazard: 1

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2024/02/16

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

SAFETY DATA SHEET

EAS6-00K44

Section 1. Identification

Product name : POWDURA® Epoxy Powder Coating
ONECURE ZN

Product code : EAS6-00K44

Other means of identification : Not available.

Product type : Powder.

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

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

National contact : Sherwin-Williams Canada Inc.
180 Brunel Road
Mississauga, Ontario L4Z 1T5 Canada

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: 866-722-9710
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

Classification of the substance or mixture : COMBUSTIBLE DUSTS
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 60.1% (dermal), 60.1% (inhalation)

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of causing cancer.
May damage fertility or the unborn child.
May form combustible dust concentrations in air.

Section 2. Hazards 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 and eye or face protection. Avoid breathing dust or mist. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response : IF exposed or concerned: Get medical advice or attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash 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.

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

Supplemental label elements

Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified : None known.

Hazards identified when used : No known significant effects or critical hazards.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	Identifiers
Titanium Dioxide	4.68	13463-67-7
4,4'-Isopropylidenediphenol	2.22	80-05-7
Zinc Oxide	1.79	1314-13-2
Epoxy Polymer	0.59	25036-25-3
2-Methyl-1H-imidazole	0.16	693-98-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Section 4. First aid measures

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.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

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 : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Section 4. First aid measures

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical powder.

Unsuitable extinguishing media : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Specific hazards arising from the chemical : May form explosible dust-air mixture if dispersed.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

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. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. 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).

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill : 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. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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 ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 in a segregated and approved area. Store in original container protected 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. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. 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 (OSHA United States)

Ingredient name	CAS #	Exposure limits
Titanium Dioxide	13463-67-7	**ACGIH TLV (United States, 1/2024)** A3. TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles. **NIOSH REL (United States, 10/2020)** NIA. **OSHA PEL (United States, 5/2018)** TWA 8 hours: 15 mg/m³. Form: Total dust.
4,4'-Isopropylidenediphenol	80-05-7	None.
Zinc Oxide	1314-13-2	**ACGIH TLV (United States, 1/2024)** TWA 8 hours: 2 mg/m³. Form: Respirable fraction. STEL 15 minutes: 10 mg/m³. Form: Respirable fraction.

Section 8. Exposure controls/personal protection

		NIOSH REL (United States, 10/2020) TWA 10 hours: 5 mg/m³. Form: Dust and fumes. STEL 15 minutes: 10 mg/m³. Form: Fume. CEIL: 15 mg/m³. Form: Dust. **OSHA PEL (United States, 5/2018)** TWA 8 hours: 15 mg/m³. Form: Total dust. TWA 8 hours: 5 mg/m³. Form: Respirable fraction. TWA 8 hours: 5 mg/m³. Form: Fume.
Epoxy Polymer	25036-25-3	None.
2-Methyl-1H-imidazole	693-98-1	None.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Zinc Oxide	1314-13-2	**CA Saskatchewan Provincial (Canada, 4/2021)** STEL 15 minutes: 10 mg/m³. Form: respirable dust and fume. TWA 8 hours: 2 mg/m³. Form: respirable dust and fume. **CA British Columbia Provincial (Canada, 9/2024)** TWA 8 hours: 2 mg/m³. Form: Respirable. STEL 15 minutes: 10 mg/m³. Form: Respirable. **CA Ontario Provincial (Canada, 6/2019)** TWA 8 hours: 2 mg/m³. Form: Respirable particulate matter.. STEL 15 minutes: 10 mg/m³. Form: Respirable particulate matter.. **CA Quebec Provincial (Canada, 2/2024)** TWAEV 8 hours: 2 mg/m³. Form: respirable aerosol fraction. STEV 15 minutes: 10 mg/m³. Form: respirable aerosol fraction. **CA Alberta Provincial (Canada, 3/2023)** OEL 8 hours: 2 mg/m³. Form: Respirable. OEL 15 minutes: 10 mg/m³. Form: Respirable.
2-Methyl-1H-imidazole	693-98-1	**CA British Columbia Provincial (Canada, 9/2024)** Carc 2B.

Occupational exposure limits (Mexico)

Ingredient name	CAS #	Exposure limits
Zinc Oxide	1314-13-2	**NOM-010-STPS-2014 (Mexico, 4/2016)** TWA 8 hours: 2 mg/m³. Form: Respirable fraction. STEL 15 minutes: 10 mg/m³. Form: Respirable fraction.

Biological exposure indices (United States)

No exposure indices known.

Biological exposure indices (Canada)

Section 8. Exposure controls/personal protection

No exposure indices known.

Biological exposure indices (Mexico)

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. Contaminated work clothing should not be allowed out of the workplace. 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. If operating conditions cause high dust concentrations to be produced, use dust 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.

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 : Solid.

Color : Gray.

Odor : Not available.

Odor threshold : Not available.

Section 9. Physical and chemical properties

pH : Not applicable.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : Not available.

Flash point : Closed cup: Not applicable.

Evaporation rate : Not available.

Flammability : Not available.

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

Vapor pressure : Not available.

Relative vapor density : Not applicable.

Relative density : 2.57

Density : 2.56 g/cm³

Solubility(ies) :

Media	Result
cold water	Not soluble

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

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): >20.5 mm^2/s (>20.5 cSt)

Molecular weight : Not applicable.

Particle characteristics

Median particle size : Not available.

Heat of combustion : 1.047 kJ/g

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 the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Section 10. Stability and reactivity

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
4,4'-Isopropylidenediphenol	**Rat - Oral - LD50** 1200 mg/kg Toxic effects: Effects on Fertility - Female fertility index (e.g., number of females pregnant per number of sperm-positive females; number of females pregnant per number of females mated)

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name	Result
Titanium Dioxide	**Human - Skin - Mild irritant** Duration of treatment/exposure: 72 hours Amount/concentration applied: 300 ug I
4,4'-Isopropylidenediphenol	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg **Rabbit - Skin - Mild irritant** Amount/concentration applied: 250 mg
Zinc Oxide	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
4,4'-Isopropylidenediphenol	**Rabbit - Eyes - Severe irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 250 ug
Zinc Oxide	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Section 11. Toxicological information

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	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-
2-Methyl-1H-imidazole	-	2B	-

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
4,4'-Isopropylidenediphenol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Section 11. Toxicological information

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

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

Not available.

Conclusion/Summary [Product] : Not available.

General : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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 : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
POWDURA® Epoxy Powder Coating	54170.7	N/A	N/A	N/A	N/A
4,4'-Isopropylidenediphenol	1200	N/A	N/A	N/A	N/A
2-Methyl-1H-imidazole	500	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Titanium Dioxide	**Acute - LC50 - Marine water** Fish - Mummichog - *Fundulus heteroclitus* >1000 mg/l [96 hours] Effect: Mortality
4,4'-Isopropylidenediphenol	**Acute - LC50 - Marine water** Crustaceans - Opossum shrimp - *Americamysis bahia* - Larvae Age: 24 hours 1.34 mg/l [48 hours] Effect: Mortality **Chronic - NOEC - Fresh water** Fish - Goldfish - *Carassius auratus* - Adult Age: 2 to 3 years 0.2 µg/l [90 days] Effect: Reproduction **Acute - LC50 - Marine water** Fish - Rivulus - *Rivulus marmoratus* - Embryo 3.5 mg/l [96 hours] Effect: Mortality **Chronic - NOEC - Marine water** Crustaceans - Harpacticoid copepod - *Tigriopus japonicus* - Nauplii Age: <24 hours 10 µg/l [21 days] Effect: Reproduction **Chronic - NOEC - Marine water** Algae - Dinoflagellate - *Alexandrium pacificum* 20.1 µg/l [4 days] Effect: Physiology **Acute - EC50** OECD Algae - Green algae - *Raphidocelis subcapitata* 1.32 mg/l [72 hours] Effect: Population
Zinc Oxide	**Acute - LC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* - Neonate Age: <24 hours 98 µg/l [48 hours] Effect: Mortality **Acute - LC50 - Fresh water** US EPA Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* Weight: 0.78 g 1.1 ppm [96 hours] Effect: Mortality

Section 12. Ecological information

2-Methyl-1H-imidazole	**Acute - IC50 - Fresh water** Algae - Green algae - *Raphidocelis subcapitata* - Exponential growth phase 46 µg/l [72 hours] Effect: Population **Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 30 days; Size: 22.8 mm; Weight: 0.206 g 286 mg/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
4,4'-Isopropylidenediphenol	-	20 to 67	Low
Zinc Oxide	-	28960	High

Mobility in soil

Soil/Water partition coefficient : Not available.

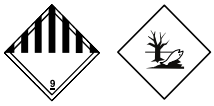
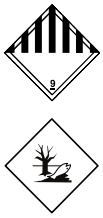
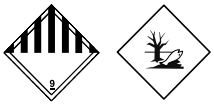
Other adverse effects

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN3077	Not regulated.	Not regulated.	UN3077	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Zinc Powder). Marine pollutant	-	-	Environmentally hazardous substance, solid, n.o.s. (Zinc Powder, 4,4'-Isopropylidenediphenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Powder, 4,4'-Isopropylidenediphenol). Marine pollutant (Zinc Powder, 4,4'-Isopropylidenediphenol)
Transport hazard class(es)	9 	-	-	9 	9 
Packing group	III	-	-	III	III
Environmental hazards	Yes.	No.	No.	Yes.	Yes.
Additional information	Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg. **ERG No.**	-	-	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. **Emergency schedules** F-A, S-F

Section 14. Transport information

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

International regulations

Montreal Protocol

Not listed.

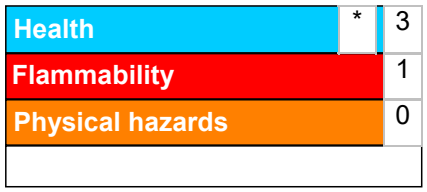
Stockholm Convention on Persistent Organic Pollutants

Not listed.

International lists : **Australia inventory (AIIC)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Section 16. Other information

Classification	Justification
COMBUSTIBLE DUSTS	On basis of test data
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method

History

Date of printing : 9/15/2025

Date of issue/Date of revision : 9/15/2025

Date of previous issue : 7/17/2025

Version : 32

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
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
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

AeroTron-100®

Non-Flammable Precision Vapor Degreasing and Cleaning Solvent

1. Product and Company Information:

Product Name: **AeroTron-100**

Product General Use: Non-Flammable Precision Vapor Degreasing and Cleaning Solvent for Industrial Use Only

Manufacturer: Reliance Specialty Products, Inc.,
154 Easy Street – Carol Stream, IL 60188
Ph. 847-640-8923 www.relspec.com

Emergency Telephone Number: **CHEM-TEL 24 HOUR EMERGENCY RESPONSE**
USA and CANADA: Ph. (800) 255-3924

Non-Emergency Telephone Number: Reliance Technical Support Dept. at 847-640-8923

2. Hazards Identification

Signal Word	**Warning**
Symbol	
Hazard Statements	May cause serious eye irritation May cause respiratory irritation May cause skin irritation May cause drowsiness or dizziness
Precautionary Statements	Keep away from heat/sparks/open flames/hot surfaces. - No smoking Do not breathe dust/fume/gas/mist/vapors/spray Wear protective gloves/protective clothing/eye protection/face protection Avoid release to the environment IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower In case of fire: Use carbon dioxide, dry chemical powder, alcohol foam or polymer foam for extinction IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Store in a well-ventilated place. Keep container tightly closed Dispose of contents/container in accordance with national and international regulations

Occupation Exposure Limits: See Section 8 of this SDS
Additional Toxicological Information: See Section 11 of this SDS

3. Composition and Ingredient Information

Component	Synonym	CAS Number	Weight Percentage
Proprietary Fluorinated Solvent(s) – US EPA SNAP Program Approved		Proprietary Trade Secret	<15.0%
trans-Dichloroethylene	trans-1,2-Dichloroethene	156-60-5	>85.0%
Proprietary Performance Additives		Proprietary Trade Secret	<5.0%

4. First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.
Ingestion: Do not induce vomiting. Seek medical attention.
Skin: Remove contaminated clothing. Thoroughly wash affected area with soap and water; use skin cream if irritation is severe.
Eyes: Immediately flush eyes with water for 15 minutes. Call a physician if irritation persists.

5. Fire Fighting Measures

FLASH POINT:
NONE by ASTM D93
NONE by ASTM D56
FLAMMABLE LIMITS: UEL: 7.0% LEL: 14%
AUTOIGNITION: 460°C
Extinguishing Media: Use dry chemical, chemical foam, or carbon dioxide as dictated by the surrounding circumstances.
Special Fire Fighting Procedures: Wear NIOSH approved self-contained breathing apparatus (set on positive pressure mode) and personal protective equipment. Avoid skin and eyes contact in fire situations.
Unusual Fire and Explosions Hazard: In fires, toxic and corrosive gases may be released. Vapor will form a flammable mixture in a narrow concentration range of 7.0% to 14.0% by volume in air.

6. Accidental Release Measures

Contain spillage or leakage with dikes or absorbent material to prevent migration into sewer or waterway. Absorb spill with an inert material and place in a chemical waste container for disposal. For large spills, evacuate and ventilate the area. Wear self-contained breathing apparatus and recommended personal protective equipment. Observe government regulations.

7. Handling and Storage

HANDLING: Handle in accordance with good industrial hygiene and safety practices. Always provide ventilation and minimize the inhaling solvent vapor and mist. Wear protective clothing, eyewear and gloves (see other sections of SDS for more details).
STORAGE: Store in well ventilated, cool, dry area. Store in original container only. Keep container closed when not in use. Minimize introduction of water or moisture into the product. Avoid Freezing temperatures. If stored below 15°F (-10°C) then the product must be thawed and mixed prior to usage.
STORAGE TEMPERATURE: Avoid overheating (temperatures above 125°F) and freezing (temperatures below 15°F).

8. Exposure Controls and Personal Protection

Component	**Weight Percentage**	**Workplace Exposure Limits / Recommendations**
Proprietary Fluorinated Solvent(s) – US EPA SNAP Program Approved	<15.0%	OSHA PEL: Not Established ACGIH TLV: None US EPA SNAP Program: 50 ppm 8 hour TWA, 150 ppm ceiling limit (Note: The least favorable of all Workplace Exposure Limits/ Recommendations of these proprietary comports are listed herein)
trans-Dichloroethylene CAS 156-60-5	>85.0%	OSHA PEL: 200 ppm ACGIH TLV: 200ppm
Proprietary Performance Additives	<5.0%	OSHA PEL(S): 400 ppm ACGIH TLV(S): 200 ppm (Note: The least favorable Workplace Exposure Limits /Recommendation of all of these proprietary components are listed herein)

RESPIRATORY PROTECTION: Use a NIOSH approved organic vapor respirator if ventilation is not sufficient. Of particular concern are when filling, emptying or maintaining your cleaning equipment and at other instances where there is a the likelihood of high emissions of solvent vapor.
VENTALATION AND PROPER EQUIPMENT CONTROLS: Exposure to the product can be minimized through use of appropriate ventilation and emission controls and proper equipment maintenance.
CLOTHING/GLOVES: Wear safety glasses. Use of gloves is recommended. Gloves rated for organic solvents offer the best extended protection. Nitrile, neoprene, or butyl gloves offer less protection and should be used for splash protection only. DO NOT use natural rubber gloves when handling this product.
EYE PROTECTION: Always wear safety goggles or full-face shield.
WORK/HYGIENIC PRACTICES: Do not eat, drink, or smoke while working with this product. Launder soiled clothes. Provide emergency eye bath and safety shower.

9. Physical Properties

APPERANCE AND ODOR: Clear Colorless Liquid with Ether-Like Odor
BOILING POINT: (760 mm Hg): Initial 109°F (43°C) / Sustained Vapor Degreasing 116°F / (47°C)
FREEZE POINT: (760 mm Hg): <-58°F (<-50°C)
FLASHPOINT: None (by ASTM D93 and D56)
SPECIFIC GRAVITY: (25°C, g/cm^3): 1.28
VAPOR PRESSURE: (atm @ 25° C): 0.52
SOLUBILITY IN WATER: Negligible (0.15 g/100ml)
REACTIVITY IN WATER: Not Readily Hydrolyzed

10. Stability and Reactivity

STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: Avoid open flame, electric arc and other high energy ignition sources.
INCOMPATIBILITY: Incompatible with strong alkalis, oxidizers, bases, reactive metals and natural rubber.
HAZARDOUS DECOMPOSITION: Thermal decomposition produces carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen fluoride and other chlorinated and fluorinated hydrocarbons.
HAZARDOUS POLYMERIZATION: Will not occur.

11. Toxicological Information

Proprietary Fluorinated Solvent(s) – US EPA SNAP Program Approved*
LC50 Inhalation/Rat >20 mg/L
LD50 Oral/Rat >2,000mg/kg
LD50 Dermal/Rat >2,000mg/kg
Carcinogenicity – Not listed on IARC

(*Note: Most severe effect among proprietary components are listed).

trans-Dichloroethylene (CAS 156-60-5)
LD50/Oral/Rat: >7,902 mg/kg
LD50/ Dermal/ Rat: >5,000 mg/kg
LC50/ Inhalation/ 4 Hour / Rat: 96 mg/l
Skin irritant - Rabbit Testing
Mild eye irritant – Rabbit Testing
Mutagenicity: Tests on bacteria, mammal cell cultures and animals did not show mutagenic effects.
Carcinogenicity – Not listed on IARC

Proprietary Performance Additives*:
LD50 Oral/Rat >5,000 mg/kg
LD50 Dermal/Rabbit > 11,000 mg/kg
LC50: Inhalation/Rat >50,000 mg/m^3
Carcinogenicity: Not classified by IARC

(*Note: Most severe effect among proprietary components are listed).

12. Ecological Information

Proprietary Fluorinated Solvent(s)
96 hour LC50 for rainbow trout: >12.0 mg/l
48 hour LC50 for Daphnia magna: >10.0 mg/l

trans-Dichloroethylene (CAS 156-60-5)
96 hour LC50 for flathead minnows: 27.2 mg/l
48 hour LC50 for Daphnia magna: 79 mg/l

13. Disposal Considerations

Follow all Federal, State and Local governmental regulations. DO NOT flush into sanitary sewer or waterway.

14. Transportation Information

CLASSIFICATION:

FOR 1, 5, 30 and 55 GALLON PACKAGES: Not regulated for transportation by US DOT or USPS for shipment

FOR PACKAGES GREATER THAN 1000lbs.: Regulated for Shipment – Contact Manufacturer for Specific Details

PROPER SHIPPING NAMES: Cleaning Solvent Mixture

15. Regulatory Information

TSCA: All components of this product are listed on the EPA TSCA inventory. One or more of the Proprietary Fluorinated Solvents are controlled by TSCA Section 5, Significant New Use Rule (SNUR; 40 CFR 721.5645) and is the subject of a significant new use rule (SNUR) under 40 CFR Part 721.
NESHAP: Not Regulated under NESHAP
RCRA: N/A
HAP: Not a Hazardous Air Pollutant under NESHAP
SARA: Section 304 (RQ): None of the components have a RQ
Section 302 (TPQ): None of the Components have a TPQ
Section 313: The following components are subject to the reporting requirements of Section 313 of SARA Title III: trans-Dichloroethylene (CAS 156-60-5
CERCLA: RQ of 1000lbs. for trans-Dichloroethylene (CAS 156-60-5)
US EPA SNAP PROGRAM:

- **FINAL USE APPROVAL:** USEPA SNAP Program Final Approval was issued for in Metal Cleaning, Electronics Cleaning and Precision Cleaning for all solvent components in the AeroTron Formulation.

California Proposition 65: Conforms to Proposition 65 - No components are contained on the California Proposition 65 List
PA Right to Know Regulated Chemical(s): Substances on the PA Hazardous Substances List present at a concentration grater than 1.0%: trans-Dichloroethylene
NJ Right to Know Regulated Chemical(s): Substances on the NJ Workplace Hazardous Substances List present at a concentration of 1.0% or more: trans-Dichloroethylene
EEC (EINECS): Ingredients Listed **CANADA (DSL):** Ingredients Listed

16. Other Information

HMIS RATING (Scale 0 to 4):

	HMIS
Health	**1**
Flammability	**0**
Physical Hazards	**0**

***Chronic Hazard (Long-term health effects may result from repeated overexposure.)**
0= Minimal Hazard, 1= Slight Hazard, 2= Moderate Hazard, 3 = Serious Hazard, 4= Severe Hazard

Reliance Specialty Products, Inc.'s offers the information and opinions contained in this Material Safety Data Sheet as a guide to the physical characteristics and use of this Product and believe it to be accurate as of the date of this document. However, it is the responsibility of the user to establish the suitability of the Product for their particular application and to establish the conditions for safe use of the product and compliance with all applicable laws and regulations. Reliance Specialty Products, Inc. disclaims all warranties, express or implied, in connection with the opinions and information contained herein and the use of the Product.

END OF SDS

CHEMEON TCP-HF™

SECTION 1: Identification

Product identifier: **CHEMEON TCP-HF™**
Other names: Not applicable.
Product Code Number: Not applicable.
Recommended use: Conversion coating and Anodizing Sealant.
Recommended restrictions: Uses other than as recommended above.

Manufacturer/Importer/Supplier/Distributor information:

Company Name: CHEMEON Surface Technology, LLC.
Company Address: 2241 Park Place, Bldg. B
Minden, NV 89423.
Company Telephone: (775) 782-8324
Company Contact Name: Customer Service
8:00 AM – 5:00 PM PST, Mon-Fri.
Emergency phone number: Chemtrec 24 hr. Emergency Telephone
800-424-9300 within U.S
703-527-3887 outside U.S.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards
No physical hazards under GHS classification.

Health hazards
Skin irritation, Category 2.
Eye irritation, Category 2A.

Environmental hazards
No environmental hazards under GHS classification.

GHS Signal word: **WARNING.**

GHS Hazard statement(s): H315 - Cause skin irritation.
H319 - Causes serious eye irritation.

GHS Hazard symbol(s):

GHS Precautionary statement(s):

Prevention:
- P264 - Wash skin thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves/ eye protection/ face protection.

Response:
- P302+P352 - If on skin: Wash with plenty of water.
- P305 + P351 + P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash it before reuse.

Storage:
- No storage precautionary statements required.

Disposal:
- Dispose of contents/container in accordance with local/regional/national/ international regulations.

Hazard(s) not otherwise Classified (HNOC): None known.

Percentage of ingredient(s) of unknown acute toxicity:
99% of the mixture consists of ingredients of unknown acute toxicity (oral).
100% of the mixture consists of ingredients of unknown acute toxicity (dermal/inhalation).

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
Chromium Sulfate, Basic Solution	12336-95-7	< 2%

Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid Measures

Inhalation: Immediately move person to fresh air if vapor or mist of product is inhaled. Seek immediate medical attention if symptoms develop.

Skin contact: Immediately remove all contaminated clothing. Wash affected area with water and soap. If irritation occurs seek medical attention.

Eye contact: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Ensure adequate flushing of eyes by separating eyelids with fingers. Seek medical attention.

Ingestion: Wash out mouth with large amounts of water and do not induce vomiting. Seek medical attention.

Most important symptoms/effects, acute and delayed: Prolonged and/or repeated contact may cause fluoride type irritation and/or dermatitis. May cause irritation to the eye. May cause GI irritation, including nausea, vomiting, and diarrhea. May be harmful if swallowed in large quantities. May exacerbate pre-existing eye, skin, and lung disorders.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Product is an aqueous mixture and will not burn. Use measures suitable to surrounding fire. Use Water, CO_2 or dry chemical.
Unsuitable extinguishing media: Not applicable.

Specific hazards arising from the chemical:
USE WATER WITH CAUTION! Material will float and may ignite on the surface of water. Fight fire from a protected location. Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool. Vapors may cause a flash fire or ignite explosively. Vapors may travel to a source of ignition and flashback. Prevent buildup of vapors to explosive concentrations.

Hazardous combustion products - Fire conditions may produce small amounts of hexavalent chromium, SO_2 , SO_3 and HF if exposed to elevated temperatures.

Special protective equipment and precautions for fire-fighters:
Wear full protective clothing and a self-contained respirator to avoid inhalation of possibly irritating and toxic fumes. Fight fire from a protected location. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Evacuate danger area. Stay upwind and away from spill/release. Avoid direct contact with liquid and vapors. For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

Methods and material for containment and cleaning up: Absorb spill with inert material and shovel into appropriate waste disposal container. Dispose of collected material according to regulations.

SECTION 7: Handling and Storage

Precautions for safe handling: Do not get this material in your eyes, on your skin, or on your clothing. Wash thoroughly after handling. For industrial use only. Do not take internally. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of the product.

Conditions for safe storage, including any incompatibles: Keep container tightly closed in a cool, well-ventilated place. Keep away from heat and light. Store above 40°F, away from strong bases/alkalis and strong oxidizers.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits			
Substance	**PEL-TWA (8 hour)**	**PEL-STEL (15 min)**	**REMARKS**
Chromium Sulfate, Basic Solution (as Cr)	0.5 mg/m^3	No data available	

US ACGIH Threshold Limit Values			
Substance	**TLV-TWA**	**TLV-STEL**	**REMARKS**
Chromium Sulfate, Basic Solution (as Cr)	0.003 mg/m^3-(IHL)	No data available	

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses and a face shield where a splash hazard exists. Wear a full-face respirator, if needed. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and Hand protection: Impervious gloves and protective clothing are recommended. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Other: Eye wash, safety shower and washing facilities should be available in the work area.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance	
Physical state:	Liquid
Color:	Translucent dark-green
Odor:	Mild to no odor.
Odor threshold:	No data available
pH:	2.1 – 3.5
Melting point/freezing point:	freezing point 0 ºC
Initial Boiling Point and boiling range:	> 100 °C (> 212 ºF) @ 760 mmHg
Flash point:	Not applicable
Evaporation rate:	Not determined
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower %):	Not applicable
Flammability limit – upper (%):	Not applicable
Explosive limit – lower (%):	Not applicable
Explosive limit – upper (%):	Not applicable
Vapor pressure:	Not determined
Vapor density (air=1):	Not determined
Relative density (water = 1):	Not determined
Solubility(ies):	100%
Partition coefficient (n-octanol/water):	Not available

Auto-ignition temperature: Not applicable
Decomposition temperature: Not available
Viscosity @ 20°C: Not available
Weight per gallon: 8.5 lbs.
% Volatiles by wt: 0

SECTION 10: Stability and Reactivity

Reactivity: Not chemically reactive.
Chemical stability: Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions: Hazardous reactions not anticipated.
Conditions to avoid: Avoid contact with incompatible materials, elevated temperatures, sparks, flames and ignition sources.
Incompatible materials: This product is incompatible with strong bases/alkalis and strong oxidizers.
Hazardous decomposition products: This product may emit harmful gases if exposed to elevated temperatures**.** Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: None expected. May exacerbate lung disorders.
Ingestion: None expected. May cause GI irritation, including nausea, vomiting, and diarrhea. Maybe harmful if swallowed in large quantities.
Skin: Prolonged and/or repeated contact may cause fluoride-type irritation and/or dermatitis. Skin absorption not expected.
Eyes: May cause irritation to the eye.

Target Organ(s): Eye, skin, lungs.

Symptoms related to the physical, chemical, and toxicological characteristics:
May exacerbate pre-existing eye, skin, and lung disorders.

Delayed and immediate effects and chronic effects from short or long-term exposure:
Prolonged and/or repeated contact may cause fluoride type irritation and/or dermatitis.

Numerical measures of toxicity:
Acute toxicity estimates:
Ingredient Information:

Substance	Test Type (species)	Value
Chromium Sulfate, Basic Solution	LD_{50} Oral (Rat)	No data available
	LD_{50} Dermal (Rabbit)	No data available
	LC_{50} Inhalation (Rat)	No data available

Product Acute Toxicity Estimates:

Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation:	Prolonged and/or repeated contact may cause fluoride-type irritation and/or dermatitis.
Serious eye damage/eye irritation:	This material can cause eye irritation. Symptoms may include irritation, redness, and tearing.
Respiratory sensitization:	No information available on the mixture, however none of the components have been classified for respiratory sensitization (or are below the concentration threshold for classification).
Skin sensitization:	No information available on the mixture, however none of the components have been classified for skin sensitization (or are below the concentration threshold for classification).
Germ cell mutagenicity:	No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).
Carcinogenicity:	No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.
Reproductive toxicity:	No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).
Specific target organ toxicity-Single exposure:	No information available on the mixture, however none of the components have been classified for Specific target organ toxicity- Single exposure (or are below the concentration threshold for classification).
Specific target organ toxicity-	

Repeat exposure: No information available on the mixture, however none of the components have been classified for Specific target organ toxicity- Single exposure (or are below the concentration threshold for classification).

Aspiration hazard: No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).

Further information: No data available

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
Chromium Sulfate, Basic Solution (as Cr)	LC_{50}	Fish	No data available
	EC_{50}	Invertebrate	No data available
	EC_{50}	Algae	No data available

Persistence and Degradability: No data available
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other adverse effects: None anticipated.

SECTION 13: Disposal considerations

Disposal instructions:
Product - Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated packaging - Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

SECTION 14: Transport Information

Land transport DOT
This material is not classified as dangerous under DOT regulations.

Maritime transport IMDG
This material is not classified as dangerous under IMDG regulations.

Air transport ICAO-TI and IATA-DGR
This material is not classified as dangerous under IATA regulations.

Environmental hazards
Marine pollutant: No.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)
No further relevant information available.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.
None.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, as required, or are exempt from the TSCA inventory.

CERCLA Hazardous Substance List, 40 CFR 302.4: None

SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None

Section 311/312 (40 CFR 370):
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):

Component	CAS No.	Weight %
Chromium Sulfate, Basic Solution	12336-95-7	< 2%

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986:
This product does not contain chemicals known to the State of California to cause reproductive effects.

New Jersey Right to Know: Chromium Hydroxide Sulfate is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Chromium Hydroxide Sulfate is listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: This product has been classified as Class D2B in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

SECTION 16: Other Information

To the best of our knowledge, the information contained herein is accurate. However, CHEMEON Surface Technology, LLC does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.