



## Stat-Rez ESD Nano 275 'A' Medium Gray

### ICP Construction Inc.

Version No: 3.6  
Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: **05/26/2022**  
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S.GHS.USA.EN

#### SECTION 1 Identification

##### Product Identifier

Product name	Stat-Rez ESD Nano 275 'A' Medium Gray
Synonyms	Not Available
Proper shipping name	Resin Solution, flammable
Other means of identification	Not Available

##### Recommended use of the chemical and restrictions on use

Relevant identified uses	ESD Coating
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##### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Construction Inc.
Address	150 Dascomb Road Andover, MA 01810 United States
Telephone	1-866-667-5119 1-978-623-9987
Fax	Not Available
Website	<a href="http://www.icpgroup.com">www.icpgroup.com</a>
Email	sds@icpgroup.com

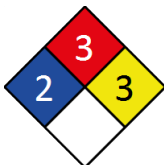
##### Emergency phone number

Association / Organisation	ChemTel
Emergency telephone numbers	1-800-255-3924
Other emergency telephone numbers	1-813-248-0585

#### SECTION 2 Hazard(s) identification

##### Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification	Serious Eye Damage/Eye Irritation Category 2A, Sensitisation (Respiratory) Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Flammable Liquids Category 2, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Skin Corrosion/Irritation Category 2, Carcinogenicity Category 2
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##### Label elements

Hazard pictogram(s)	
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Signal word	<b>Danger</b>
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##### Hazard statement(s)

## Stat-Rez ESD Nano 275 'A' Medium Gray

H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H373	May cause damage to organs through prolonged or repeated exposure.
H225	Highly flammable liquid and vapour.
H335	May cause respiratory irritation.
H315	Causes skin irritation.
H351	Suspected of causing cancer.

**Hazard(s) not otherwise classified**

Not Applicable

**Precautionary statement(s) Prevention**

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof (electrical/ventilating/lighting) equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fumes/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement(s) Response**

P304+P340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
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.
P333+P313	IF skin irritation or rash occurs: Get medical advice/attention.
P337+P313	IF EYE irritation persists: Get medical advice/attention.
P391	Collect spillage
P363	Wash contaminated clothing before reuse.

**Precautionary statement(s) Storage**

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

**Precautionary statement(s) Disposal**

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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Not Applicable

**SECTION 3 Composition / information on ingredients****Substances**

See section below for composition of Mixtures

**Mixtures**

CAS No	%[weight]	Name
13463-67-7*	10-30	<u>Titanium Dioxide TiO2</u>
1333-86-4	0.1-1	<u>carbon black</u>
4083-64-1	1-5	<u>p-toluenesulfonyl isocyanate</u>
67-64-1	1-5	<u>acetone</u>
98516-30-4	1-5	<u>propylene glycol monoethyl ether acetate - isomers</u>
108-65-6	1-5	<u>propylene glycol monomethyl ether acetate, alpha-isomer</u>
98-56-6	10-30	<u>4-chlorobenzotrifluoride</u>
70969-70-9	1-5	<u>2-ethylhexyl 3,5,5-trimethylhexanoate</u>

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## Stat-Rez ESD Nano 275 'A' Medium Gray

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## SECTION 4 First-aid measures

### Description of first aid measures

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh running water.</li> <li>▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If fumes or combustion products are inhaled remove from contaminated area.</li> <li>▶ Lay patient down. Keep warm and rested.</li> <li>▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>▶ Transport to hospital, or doctor, without delay.</li> </ul> <p>Following uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted.</p>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> <li>▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>

### Most important symptoms and effects, both acute and delayed

See Section 11

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

for simple esters:

#### BASIC TREATMENT

- ▶ Establish a patent airway with suction where necessary.
- ▶ Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- ▶ Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- ▶ Monitor and treat, where necessary, for pulmonary oedema .
- ▶ Monitor and treat, where necessary, for shock.
- ▶ **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- ▶ Give activated charcoal.

#### ADVANCED TREATMENT

- ▶ Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- ▶ Positive-pressure ventilation using a bag-valve mask might be of use.
- ▶ Monitor and treat, where necessary, for arrhythmias.
- ▶ Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- ▶ Drug therapy should be considered for pulmonary oedema.
- ▶ Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- ▶ Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation.

#### EMERGENCY DEPARTMENT

- ▶ Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- ▶ Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- ▶ Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L. *EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994*

For sub-chronic and chronic exposures to isocyanates:

- ▶ This material may be a potent pulmonary sensitiser which causes bronchospasm even in patients without prior airway hyperreactivity.
- ▶ Clinical symptoms of exposure involve mucosal irritation of respiratory and gastrointestinal tracts.
- ▶ Conjunctival irritation, skin inflammation (erythema, pain vesiculation) and gastrointestinal disturbances occur soon after exposure.
- ▶ Pulmonary symptoms include cough, burning, substernal pain and dyspnoea.
- ▶ Some cross-sensitivity occurs between different isocyanates.
- ▶ Noncardiogenic pulmonary oedema and bronchospasm are the most serious consequences of exposure. Markedly symptomatic patients should receive oxygen, ventilatory support and an intravenous line.
- ▶ Treatment for asthma includes inhaled sympathomimetics (epinephrine [adrenalin], terbutaline) and steroids.
- ▶ Activated charcoal (1 g/kg) and a cathartic (sorbitol, magnesium citrate) may be useful for ingestion.
- ▶ Mydriatics, systemic analgesics and topical antibiotics (Sulamyd) may be used for corneal abrasions.
- ▶ There is no effective therapy for sensitised workers.

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[Ellenhorn and Barceloux; Medical Toxicology]

**NOTE:** Isocyanates cause airway restriction in naive individuals with the degree of response dependant on the concentration and duration of exposure. They induce smooth muscle contraction which leads to bronchoconstrictive episodes. Acute changes in lung function, such as decreased FEV1, may not represent sensitivity.

[Karol & Jin, Frontiers in Molecular Toxicology, pp 56-61, 1992]

Personnel who work with isocyanates, isocyanate prepolymers or polyisocyanates should have a pre-placement medical examination and periodic examinations thereafter, including a pulmonary function test. Anyone with a medical history of chronic respiratory disease, asthmatic or bronchial attacks, indications of allergic responses, recurrent eczema or sensitisation conditions of the skin should not handle or work with isocyanates. Anyone who develops chronic respiratory distress when working with isocyanates should be removed from exposure and examined by a physician. Further exposure must be avoided if a sensitivity to isocyanates or polyisocyanates has developed.

## SECTION 5 Fire-fighting measures

### Extinguishing media

- ▶ Alcohol stable foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).

### Special hazards arising from the substrate or mixture

<b>Fire Incompatibility</b>	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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### Special protective equipment and precautions for fire-fighters

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ May be violently or explosively reactive.</li> <li>▶ Wear breathing apparatus plus protective gloves in the event of a fire.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>▶ Liquid and vapour are highly flammable.</li> <li>▶ Severe fire hazard when exposed to heat, flame and/or oxidisers.</li> <li>▶ Vapour may travel a considerable distance to source of ignition.</li> </ul> <p>Combustion products include: carbon dioxide (CO<sub>2</sub>) isocyanates and minor amounts of hydrogen cyanide hydrogen chloride phosgene nitrogen oxides (NO<sub>x</sub>) hydrogen fluoride other pyrolysis products typical of burning organic material.</p> <p>When heated at high temperatures many isocyanates decompose rapidly generating a vapour which pressurises containers, possibly to the point of rupture. Release of toxic and/or flammable isocyanate vapours may then occur</p> <ul style="list-style-type: none"> <li>▶ Burns with acrid black smoke.</li> </ul>

## SECTION 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See section 8

### Environmental precautions

See section 12

### Methods and material for containment and cleaning up

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>▶ Remove all ignition sources.</li> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> </ul>
<b>Major Spills</b>	<ul style="list-style-type: none"> <li>▶ Liquid Isocyanates and high isocyanate vapour concentrations will penetrate seals on self contained breathing apparatus - SCBA should be used inside encapsulating suit where this exposure may occur.</li> </ul> <p>For isocyanate spills of less than 40 litres (2 m<sup>2</sup>):</p> <ul style="list-style-type: none"> <li>▶ Evacuate area from everybody not dealing with the emergency, keep them upwind and prevent further access, remove ignition sources and, if inside building, ventilate area as well as possible.</li> <li>▶ Notify supervision and others as necessary.</li> <li>▶ Put on personal protective equipment (suitable respiratory protection, face and eye protection, protective suit, gloves and impermeable boots).</li> <li>▶ Avoid contamination with water, alkalis and detergent solutions.</li> <li>▶ Material reacts with water and generates gas, pressurises containers with even drum rupture resulting.</li> <li>▶ <b>DO NOT reseal container if contamination is suspected.</b></li> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ May be violently or explosively reactive.</li> </ul>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 Handling and storage

### Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>▶ Containers, even those that have been emptied, may contain explosive vapours.</li> <li>▶ Do NOT cut, drill, grind, weld or perform similar operations on or near containers.</li> </ul>
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## Stat-Rez ESD Nano 275 'A' Medium Gray

	<p>The tendency of many ethers to form explosive peroxides is well documented. Ethers lacking non-methyl hydrogen atoms adjacent to the ether link are thought to be relatively safe</p> <ul style="list-style-type: none"> <li>▶ <b>DO NOT concentrate by evaporation, or evaporate extracts to dryness, as residues may contain explosive peroxides with DETONATION potential.</b></li> <li>▶ Any static discharge is also a source of hazard.</li> </ul> <p>The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example.</p> <p>Purchases of peroxidisable chemicals should be restricted to ensure that the chemical is used completely before it can become peroxidised.</p> <ul style="list-style-type: none"> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> </ul>
Other information	<p>for commercial quantities of isocyanates:</p> <ul style="list-style-type: none"> <li>· Isocyanates should be stored in adequately banded areas. Nothing else should be kept within the same bunding. Pre-polymers need not be segregated.</li> <li>▶ Store in original containers in approved flame-proof area.</li> <li>▶ No smoking, naked lights, heat or ignition sources.</li> <li>▶ <b>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</b></li> </ul>

## Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> <li>▶ Packing as supplied by manufacturer.</li> <li>▶ Plastic containers may only be used if approved for flammable liquid.</li> <li>▶ Check that containers are clearly labelled and free from leaks.</li> <li>▶ For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.</li> <li>▶ For materials with a viscosity of at least 2680 cSt.</li> </ul>
Storage incompatibility	<ul style="list-style-type: none"> <li>▶ Esters react with acids to liberate heat along with alcohols and acids.</li> <li>▶ Strong oxidising acids may cause a vigorous reaction with esters that is sufficiently exothermic to ignite the reaction products.</li> <li>▶ Heat is also generated by the interaction of esters with caustic solutions.</li> <li>▶ Glycol ethers may form peroxides under certain conditions; the potential for peroxide formation is enhanced when these substances are used in processes such as distillation where they are concentrated or even evaporated to near-dryness or dryness; storage under a nitrogen atmosphere is recommended to minimise the possible formation of highly reactive peroxides</li> <li>▶ Nitrogen blanketing is recommended if transported in containers at temperatures within 15 deg C of the flash-point and at or above the flash-point - large containers may first need to be purged and inerted with nitrogen prior to loading</li> <li>▶ In the presence of strong bases or the salts of strong bases, at elevated temperatures, the potential exists for runaway reactions.</li> <li>▶ Contact with aluminium should be avoided; release of hydrogen gas may result- glycol ethers will corrode scratched aluminium surfaces.</li> <li>▶ May discolour in mild steel/ copper; lined containers, glass or stainless steel is preferred</li> <li>▶ Glycols and their ethers undergo violent decomposition in contact with 70% perchloric acid.</li> </ul> <p>Propylene glycol monomethyl ether acetate:</p> <ul style="list-style-type: none"> <li>▶ may polymerise unless properly inhibited due to peroxide formation</li> <li>▶ should be isolated from UV light, high temperatures, free radical initiators</li> <li>▶ may react with strong oxidisers to produce fire and/ or explosion</li> <li>▶ reacts violently with with sodium peroxide, uranium fluoride</li> <li>▶ is incompatible with sulfuric acid, nitric acid, caustics, aliphatic amines, isocyanates, boranes</li> </ul> <ul style="list-style-type: none"> <li>· Avoid reaction with water, alcohols and detergent solutions. Isocyanates are electrophiles, and as such they are reactive toward a variety of nucleophiles including alcohols, amines, and even water. Upon treatment with an alcohol, an isocyanate forms a urethane linkage.</li> <li>▶ A range of exothermic decomposition energies for isocyanates is given as 20-30 kJ/mol.</li> <li>▶ The relationship between energy of decomposition and processing hazards has been the subject of discussion; it is suggested that values of energy released per unit of mass, rather than on a molar basis (J/g) be used in the assessment.</li> <li>▶ For example, in "open vessel processes" (with man-hole size openings, in an industrial setting), substances with exothermic decomposition energies below 500 J/g are unlikely to present a danger, whilst those in "closed vessel processes" (opening is a safety valve or bursting disk) present some danger where the decomposition energy exceeds 150 J/g.</li> </ul>

## SECTION 8 Exposure controls / personal protection

## Control parameters

## Occupational Exposure Limits (OEL)

## INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Titanium Dioxide TiO2	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Titanium Dioxide TiO2	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Titanium Dioxide TiO2	Titanium dioxide - Total dust	15 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Titanium Dioxide TiO2	Titanium dioxide	Not Available	Not Available	Not Available	Ca; See Appendix A
US ACGIH Threshold Limit Values (TLV)	Titanium Dioxide TiO2	Titanium dioxide	10 mg/m3	Not Available	Not Available	(A4)
US OSHA Permissible Exposure Limits (PELs) Table Z-3	carbon black	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	carbon black	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Not Available

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## Stat-Rez ESD Nano 275 'A' Medium Gray

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Ca; TWA 0.1 mg PAHs/m3 [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)] See Appendix A See Appendix C
US ACGIH Threshold Limit Values (TLV)	carbon black	Carbon black (Inhalable particulate matter)	3 mg/m3	Not Available	Not Available	A3
US OSHA Permissible Exposure Limits (PELs) Table Z-1	acetone	Acetone	1000 ppm / 2400 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	acetone	Acetone	250 ppm / 590 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	acetone	Acetone	250 ppm	500 ppm	Not Available	A4; BEI

## Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Titanium Dioxide TiO2	30 mg/m3	330 mg/m3	2,000 mg/m3
carbon black	9 mg/m3	99 mg/m3	590 mg/m3
acetone	Not Available	Not Available	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
Titanium Dioxide TiO2	5,000 mg/m3	Not Available
carbon black	1,750 mg/m3	Not Available
p-toluenesulfonyl isocyanate	Not Available	Not Available
acetone	2,500 ppm	Not Available
propylene glycol monoethyl ether acetate - isomers	Not Available	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available
4-chlorobenzotrifluoride	Not Available	Not Available
2-ethylhexyl 3,5,5-trimethylhexanoate	Not Available	Not Available


## Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
p-toluenesulfonyl isocyanate	E	≤ 0.1 ppm
4-chlorobenzotrifluoride	E	≤ 0.1 ppm
2-ethylhexyl 3,5,5-trimethylhexanoate	E	≤ 0.1 ppm

## Notes:

Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

## Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> <li>▶ Safety glasses with side shields.</li> <li>▶ Chemical goggles.</li> <li>▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>▶ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.</li> <li>▶ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.</li> </ul> <p>For esters:</p> <ul style="list-style-type: none"> <li>▶ Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials.</li> </ul>

## Stat-Rez ESD Nano 275 'A' Medium Gray

	<p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <ul style="list-style-type: none"> <li>▸ Isocyanate resistant materials include Teflon, Viton, nitrile rubber and some PVA gloves.</li> <li>▸ Protective gloves and overalls should be worn as specified in the appropriate national standard.</li> <li>▸ Contaminated garments should be removed promptly and should not be re-used until they have been decontaminated.</li> </ul>
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	<ul style="list-style-type: none"> <li>▸ Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent]</li> <li>▸ Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted.</li> <li>▸ Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood.</li> <li>▸ Overalls.</li> <li>▸ PVC Apron.</li> <li>▸ PVC protective suit may be required if exposure severe.</li> <li>▸ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.</li> <li>▸ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).</li> <li>▸ Non sparking safety or conductive footwear should be considered.</li> </ul>

**Respiratory protection**

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used
- In certain circumstances, personal protection of the individual employee is necessary. Personal protective devices should be regarded as being supplementary to substitution and engineering control and should not be used in preference to them as they do nothing to eliminate the hazard.
- However, in some situations, minimising exposure to isocyanates by enclosure and ventilation is not possible, and occupational exposure standards may be exceeded, particularly during on-site mixing of paints, spray-painting, foaming and maintenance of machine and ventilation systems. In these situations, air-line respirators or self-contained breathing apparatus complying with the appropriate national standard must be used.
- **Organic vapour respirators with particulate pre- filters and powered, air-purifying respirators are NOT suitable.**
- Personal protective equipment must be appropriately selected, individually fitted and workers trained in their correct use and maintenance. Personal protective equipment must be regularly checked and maintained to ensure that the worker is being protected.
- Air- line respirators or self-contained breathing apparatus complying with the appropriate national standard should be used during the clean-up of spills and the repair or clean-up of contaminated equipment and similar situations which cause emergency exposures to hazardous atmospheric concentrations of isocyanate.

**SECTION 9 Physical and chemical properties****Information on basic physical and chemical properties**

<b>Appearance</b>	Not Available		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	Not Available
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Available
<b>pH (as supplied)</b>	Not Available	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	-18	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	HIGHLY FLAMMABLE.	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Available	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Immiscible	<b>pH as a solution (Not Available%)</b>	Not Available

Continued...

## Stat-Rez ESD Nano 275 'A' Medium Gray

Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
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## SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> <li>▶ Unstable in the presence of incompatible materials.</li> <li>▶ Product is considered stable.</li> <li>▶ Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

## SECTION 11 Toxicological information

## Information on toxicological effects

Inhaled	<p>The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.</p> <p>The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by inhalation". This is because of the lack of corroborating animal or human evidence.</p> <p>Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary oedema.</p> <p>The vapour/mist may be highly irritating to the upper respiratory tract and lungs; the response may be severe enough to produce bronchitis and pulmonary oedema. Possible neurological symptoms arising from isocyanate exposure include headache, insomnia, euphoria, ataxia, anxiety neurosis, depression and paranoia. Gastrointestinal disturbances are characterised by nausea and vomiting.</p> <p>Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.</p>
Ingestion	<p>The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.</p> <p>Exposure may cause salivation, and increases in blood cholesterol and triglycerides. There may also be increase in weight of the liver and kidney and deposition of fat in the adrenal gland.</p>
Skin Contact	<p>This material can cause inflammation of the skin on contact in some persons.</p> <p>The material may accentuate any pre-existing dermatitis condition</p> <p>Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.</p> <p>Toxic effects may result from skin absorption</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>
Eye	This material can cause eye irritation and damage in some persons.
Chronic	<p>Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There is sufficient evidence to suggest that this material directly causes cancer in humans.</p> <p>Some glycol esters and their ethers cause wasting of the testicles, reproductive changes, infertility and changes to kidney function. Shorter chain compounds are more dangerous.</p> <p>Persons with a history of asthma or other respiratory problems or are known to be sensitised, should not be engaged in any work involving the handling of isocyanates.</p> <p>The chemistry of reaction of isocyanates, as evidenced by MDI, in biological milieu is such that in the event of a true exposure of small MDI doses to the mouth, reactions will commence at once with biological macromolecules in the buccal region and will continue along the digestive tract prior to reaching the stomach. Reaction products will be a variety of polyureas and macromolecular conjugates with for example mucus, proteins and cell components.</p> <p>4-chlorobenzotrifluoride (PCBTf) may have potential to cause cancer because of its structural similarities with two known cancer causing agents. Respiratory sensitisation may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping.</p> <p>Sensitisation may give severe responses to very low levels of exposure, i.e. hypersensitivity.</p>

Stat-Rez ESD Nano 275 'A' Medium Gray	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
Titanium Dioxide TiO2	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (hamster) LD50: >=10000 mg/kg <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>
	Inhalation(Rat) LC50; >2.28 mg/4h <sup>[1]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
	Oral (Rat) LD50; >=2000 mg/kg <sup>[1]</sup>	



## Stat-Rez ESD Nano 275 'A' Medium Gray

carbon black	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: >3000 mg/kg <sup>[2]</sup> Oral (Rat) LD50; >8000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
p-toluenesulfonyl isocyanate	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Inhalation(Rat) LC50; >320 ppm4h <sup>[2]</sup> Oral (Rat) LD50; 2600 mg/kg <sup>[2]</sup>	Not Available
acetone	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: 20000 mg/kg <sup>[2]</sup> Inhalation(Mouse) LC50; 44 mg/L4h <sup>[2]</sup> Oral (Rat) LD50; 5800 mg/kg <sup>[2]</sup>	Eye (human): 500 ppm - irritant Eye (rabbit): 20mg/24hr - moderate Eye (rabbit): 3.95 mg - SEVERE Eye: adverse effect observed (irritating) <sup>[1]</sup> Skin (rabbit): 500 mg/24hr - mild Skin (rabbit):395mg (open) - mild Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
propylene glycol monoethyl ether acetate - isomers	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation(Rat) LC50; >6.999 mg/L4h <sup>[2]</sup> Oral (Rat) LD50; >5000 mg/kg <sup>[2]</sup>	Eye: Slight Skin: Slight [BP Chemicals]*
propylene glycol monomethyl ether acetate, alpha-isomer	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Oral (Rat) LD50; 3739 mg/kg <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
4-chlorobenzotrifluoride	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: >2 mg/kg <sup>[2]</sup> Inhalation(Rat) LC50; >32.03 mg/4h <sup>[1]</sup> Oral (Mouse) LD50; 11500 mg/kg <sup>[2]</sup>	Not Available
2-ethylhexyl 3,5,5-trimethylhexanoate	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (Rat) LD50; >5000 mg/kg <sup>[2]</sup>	Eye (rabbit) : Not irritating * Skin (rabbit) : Not irritating *
<b>Legend:</b>	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

<b>Stat-Rez ESD Nano 275 'A' Medium Gray</b>	<p>The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Generally, linear and branched-chain alkyl esters are hydrolysed to their component alcohols and carboxylic acids in the intestinal tract, blood and most tissues throughout the body. Following hydrolysis the component alcohols and carboxylic acids are metabolized. Oral acute toxicity studies have been reported for 51 of the 67 esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids. The very low oral acute toxicity of this group of esters is demonstrated by oral LD50 values greater than 1850 mg/kg bw. Genotoxicity studies have been performed in vitro using the following esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids: methyl acetate, butyl acetate, butyl stearate and the structurally related isoamyl formate and demonstrates that these substances are not genotoxic.</p> <p>The JEFCA Committee concluded that the substances in this group would not present safety concerns at the current levels of intake the esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids are generally used as flavouring substances up to average maximum levels of 200 mg/kg.</p>
<b>CARBON BLACK</b>	<p>Inhalation (rat) TCLo: 50 mg/m<sup>3</sup>/6h/90D-I Nil reported</p> <p><b>WARNING:</b> This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.</p>
<b>P-TOLUENESULFONYL ISOCYANATE</b>	<p>Isocyanate vapours are irritating to the airways and can cause their inflammation, with wheezing, gasping, severe distress, even loss of consciousness and fluid in the lungs. Nervous system symptoms that may occur include headache, sleep disturbance, euphoria, inco-ordination, anxiety, depression and paranoia.</p> <p>For p-toluenesulfonyl isocyanate: The acute semi-lethal dose is 2600mg/kg by mouth. Because PTSA is rapidly broken down to PTSA and carbon dioxide, its repeated dose, reproductive, developmental and genetic toxicity are best described by PTSA.</p> <p>For p-toluenesulfonamide (PTSA):</p> <p>Animal testing shows that PTSA at high doses may cause changes in blood count and blood chemistry, with changes in the epithelium of the bladder and accelerated degeneration of the thymus. Sufficient doses may cause developmental effects, early delivery of foetuses or disorders in breast feeding. PTSA does not seem to cause mutations or genetic damage.</p>
<b>ACETONE</b>	<p>The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.</p> <p>For acetone:</p> <p>The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause macrocytic anaemia.</p>

## Stat-Rez ESD Nano 275 'A' Medium Gray

<p><b>PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER</b></p>	<p>A BASF report (in ECETOC ) showed that inhalation exposure to 545 ppm PGMEA (beta isomer) was associated with a teratogenic response in rabbits; but exposure to 145 ppm and 36 ppm had no adverse effects. The beta isomer of PGMEA comprises only 10% of the commercial material, the remaining 90% is alpha isomer. Hazard appears low but emphasizes the need for care in handling this chemical. [I.C.I] *Shin-Etsu SDS</p> <p>Animal testing shows that high concentrations (for example, 0.5%) are associated with birth defects but lower exposures have not been shown to cause adverse effects.</p> <p>The beta isomer of PGMEA comprises only 10% of the commercial material; the remaining 90% is alpha isomer. Hazard appears low, but emphasizes the need for care in handling this chemical.</p>		
<p><b>2-ETHYLHEXYL 3,5,5-TRIMETHYLHEXANOATE</b></p>	<p>Group A aliphatic monoesters (fatty acid esters) cause very little or no injury and are considered safe for use in cosmetics.</p> <p>For aliphatic fatty acids (and salts)</p> <p>Acute oral (gavage) toxicity:</p> <p>The acute oral LD50 values in rats for both were greater than &gt;2000 mg/kg bw Clinical signs were generally associated with poor condition following administration of high doses (salivation, diarrhoea, staining, piloerection and lethargy). There were no adverse effects on body weight in any study. In some studies, excess test substance and/or irritation in the gastrointestinal tract was observed at necropsy.</p> <p>Skin and eye irritation potential, with a few stated exceptions, is chain length dependent and decreases with increasing chain length</p> <p>According to several OECD test regimes the animal skin irritation studies indicate that the C6-10 aliphatic acids are severely irritating or corrosive, while the C12 aliphatic acid is irritating, and the C14-22 aliphatic acids generally are not irritating or mildly irritating.</p> <p>Human skin irritation studies using more realistic exposures (30-minute, 1-hour or 24-hours) indicate that the aliphatic acids have sufficient, good or very good skin compatibility.</p> <p>Animal eye irritation studies indicate that among the aliphatic acids, the C8-12 aliphatic acids are irritating to the eye while the C14-22 aliphatic acids are not irritating.</p> <p>Eye irritation potential of the ammonium salts does not follow chain length dependence; the C18 ammonium salts are corrosive to the eyes.</p> <p>Dermal absorption:</p> <p>The in vitro penetration of C10, C12, C14, C16 and C18 fatty acids (as sodium salt solutions) through rat skin decreases with increasing chain length.</p> <p>Pelargonic acid and its Esters - Cosmetic Ingredient Review: CIR Expert Panel Meeting, June 2010</p> <p>For pelargonic acid esters (branched and straight-chain):</p> <p>The CIR Expert Panel concluded that these esters are safe as cosmetic ingredients in the present practices of use and concentration.</p> <p>Pelargonic acid and nonanoate esters are cosmetic ingredients that function as skin conditioning agents in cosmetics.</p> <p>Pelargonic acid, a fatty acid, is absorbed and then metabolized by beta-oxidation in the body. The percutaneous absorption of isononyl alcohol was reported in an acute dermal toxicity study. 2-Ethylhexyl 3,5,5-trimethylhexanoate was found to cause a primary irritation score of 0.33 erythema after administration of 24 hours when applied to healthy intact and abraded rabbit skin, being fully reversible within 72 hours. Thus, the substance is considered being non-irritant to skin. 2-Ethylhexyl 3,5,5-trimethylhexanoate was found to cause a Maximum Mean Total Score of 0.0. at 24, 48 and 72 hours after application, and thus is considered non-irritant to eye. Sensitisation: 59 volunteers (of which 52 concluded the test) were exposed semi-occlusive to undiluted test material in total 10 times in the induction phase. No significant skin irritation was observed throughout this induction phase. Two weeks following the induction phase, volunteers were exposed semi-occlusively again to the undiluted test material (challenge phase) and none of them did show any positive reaction. Repeat Dose Toxicity: Because of hyaline droplet nephropathy noted in male rats down to the low dose level, no NOEL (No Observed Effect Level) for general toxicity was established in males. NOAEL (No Observed Adverse Effect Level) for general toxicity in females was established at 50 mg/kg body weight/day. Genetic toxicity: 2-Ethylhexyl 3,5,5-trimethylhexanoate was considered to be non-mutagenic. This study was conducted to assess the mutagenic potential of the test article using a bacterial test system following OECD 471 guideline and GLP principle. Salmonella typhimurium strains TA 1535, TA 1537, TA 102, TA 98 and TA 100 were treated with the test substance at five dose levels in triplicate with and without metabolic activation (10% liver S9 in standard co-factors). Toxicity to Reproduction: 2-Ethylhexyl 3,5,5-trimethylhexanoate was administered to male rats for at least 28 days and to female rats for 14 days prior to pairing, through the pairing and gestation periods until the F1 generation reached day 4 post partum. No morphological evidence of toxicological properties was detected in the reproductive organs and tissues examined. The assessment of the integrity of the spermatogenic cycle did not provide any evidence of impaired spermatogenesis. All findings for reproductive parameters recorded were within the range of normal background alterations. The NOEL (No Observed Effect Level) and NOAEL (No Observed Adverse Effect Level) for reproduction/developmental toxicity was considered to be 50 mg/kg/day, based on a higher post-implantation and post natal loss in the mid and high dose group. Developmental toxicity/ teratogenicity: Based on the results given in a rat study, the NOAEL of test article for maternal toxicity is considered to be 840 mg/kg/day, while that of developmental toxicity is greater than 2520 mg/kg/day under the conditions of the paper. *REACH Dossier</p>		
<p><b>Stat-Rez ESD Nano 275 'A' Medium Gray &amp; P-TOLUENESULFONYL ISOCYANATE &amp; 4-CHLOROBENZOTRIFLUORIDE</b></p>	<p>Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant.</p>		
<p><b>Stat-Rez ESD Nano 275 'A' Medium Gray &amp; P-TOLUENESULFONYL ISOCYANATE</b></p>	<p>Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms.</p> <p>Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema.</p> <p>Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure.</p>		
<p><b>Stat-Rez ESD Nano 275 'A' Medium Gray &amp; CARBON BLACK</b></p>	<p>No significant acute toxicological data identified in literature search.</p>		
<p><b>Stat-Rez ESD Nano 275 'A' Medium Gray &amp; 4-CHLOROBENZOTRIFLUORIDE</b></p>	<p>Medium to long term exposure to chlorobenzotrifluoride may produce increase in weight of the liver, kidney, and thyroid gland at high doses. Only limited reproductive effects were noted, and no gene alteration effects. There was also no evidence of cancer-causing potential.</p>		
<p><b>PROPYLENE GLYCOL MONOETHYL ETHER ACETATE - ISOMERS &amp; PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER</b></p>	<p>For propylene glycol ethers (PGEs):</p> <p>Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA) and tripropylene glycol methyl ether (TPM).</p> <p>Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on the reproductive organs, the developing embryo and foetus, blood or thymus gland, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces and alkoxyacetic acid.</p>		
<p><b>Acute Toxicity</b></p>	<p>✗</p>	<p><b>Carcinogenicity</b></p>	<p>✓</p>
<p><b>Skin Irritation/Corrosion</b></p>	<p>✓</p>	<p><b>Reproductivity</b></p>	<p>✗</p>
<p><b>Serious Eye Damage/Irritation</b></p>	<p>✓</p>	<p><b>STOT - Single Exposure</b></p>	<p>✓</p>
<p><b>Respiratory or Skin sensitisation</b></p>	<p>✓</p>	<p><b>STOT - Repeated Exposure</b></p>	<p>✓</p>
<p><b>Mutagenicity</b></p>	<p>✗</p>	<p><b>Aspiration Hazard</b></p>	<p>✗</p>

## Stat-Rez ESD Nano 275 'A' Medium Gray

**Legenda:** ✘ – Data either not available or does not fulfil the criteria for classification  
✔ – Data available to make classification

## SECTION 12 Ecological information

## Toxicity

Stat-Rez ESD Nano 275 'A' Medium Gray	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
Titanium Dioxide TiO2	Endpoint	Test Duration (hr)	Species	Value	Source
	BCF	1008h	Fish	<1.1-9.6	7
	NOEC(ECx)	504h	Crustacea	0.02mg/l	4
	LC50	96h	Fish	1.85-3.06mg/l	4
	EC50	72h	Algae or other aquatic plants	3.75-7.58mg/l	4
	EC50	48h	Crustacea	1.9mg/l	2
carbon black	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	24h	Crustacea	3200mg/l	1
	LC50	96h	Fish	>100mg/l	2
	EC50	72h	Algae or other aquatic plants	>0.2mg/l	2
p-toluenesulfonyl isocyanate	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	72h	Algae or other aquatic plants	10mg/l	2
	LC50	96h	Fish	>45mg/l	2
	EC50	72h	Algae or other aquatic plants	25mg/l	2
acetone	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	12h	Fish	0.001mg/L	4
	LC50	96h	Fish	3744.6-5000.7mg/L	4
	EC50	48h	Crustacea	6098.4mg/L	5
4-chlorobenzotrifluoride	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	504h	Crustacea	0.03mg/l	1
	LC50	96h	Fish	3mg/l	2
	EC50	72h	Algae or other aquatic plants	>0.41mg/l	2
2-ethylhexyl 3,5,5-trimethylhexanoate	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	72h	Algae or other aquatic plants	>=100mg/l	2
	EC50	48h	Crustacea	3.68mg/l	1
	EC50	96h	Algae or other aquatic plants	>1000mg/l	2
propylene glycol monoethyl ether acetate - isomers	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	336h	Fish	47.5mg/l	2
	LC50	96h	Fish	>100mg/l	2
	EC50	72h	Algae or other aquatic plants	>1000mg/l	2
propylene glycol monomethyl ether acetate, alpha-isomer	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	504h	Crustacea	0.03mg/l	1
	LC50	96h	Fish	3mg/l	2
	EC50	72h	Algae or other aquatic plants	>0.41mg/l	2
4-chlorobenzotrifluoride	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	504h	Crustacea	0.03mg/l	1
	LC50	96h	Fish	3mg/l	2
	EC50	72h	Algae or other aquatic plants	>0.41mg/l	2
2-ethylhexyl 3,5,5-trimethylhexanoate	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	72h	Algae or other aquatic plants	>=100mg/l	2
	EC50	48h	Crustacea	3.68mg/l	1
	EC50	96h	Algae or other aquatic plants	>1000mg/l	2
<b>Legend:</b>	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

For Propylene Glycol Ethers: log Kow's range from 0.309 for TPM to 1.523 for DPnB. Calculated BCFs range from 1.47 for DPnB to 3.16 for DPMA and TPM, indicating low bioaccumulation. Henry's Law Constants are low for all category members, ranging from 5.7 x 10<sup>-9</sup> atm-m<sup>3</sup>/mole for TPM to 2.7 x 10<sup>-9</sup> atm-m<sup>3</sup>/mole for PnB.

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## Stat-Rez ESD Nano 275 'A' Medium Gray

For 4-chlorobenzotrifluoride (PCBTF):

Environmental Fate:

Soil absorption is anticipated. This substance is relatively biodegradable and is not expected to bioaccumulate or bioconcentrate (BCF 120). It is insoluble in water; and water volatility may be high.

For Glycol Ethers:

Environmental Fate: Several glycol ethers have been shown to biodegrade however; biodegradation slows as molecular weight increases. No glycol ethers that have been tested demonstrate marked resistance to biodegradative processes. No glycol ethers that have been tested demonstrate marked resistance to biodegradative processes.

**DO NOT discharge into sewer or waterways.**

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Titanium Dioxide TiO2	HIGH	HIGH
p-toluenesulfonyl isocyanate	HIGH	HIGH
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
propylene glycol monomethyl ether acetate, alpha-isomer	LOW	LOW
4-chlorobenzotrifluoride	HIGH	HIGH

### Bioaccumulative potential

Ingredient	Bioaccumulation
Titanium Dioxide TiO2	LOW (BCF = 10)
p-toluenesulfonyl isocyanate	LOW (LogKOW = 2.3424)
acetone	LOW (BCF = 0.69)
propylene glycol monomethyl ether acetate, alpha-isomer	LOW (LogKOW = 0.56)
4-chlorobenzotrifluoride	LOW (BCF = 202)

### Mobility in soil

Ingredient	Mobility
Titanium Dioxide TiO2	LOW (KOC = 23.74)
p-toluenesulfonyl isocyanate	LOW (KOC = 882.1)
acetone	HIGH (KOC = 1.981)
propylene glycol monomethyl ether acetate, alpha-isomer	HIGH (KOC = 1.838)
4-chlorobenzotrifluoride	LOW (KOC = 1912)



## SECTION 13 Disposal considerations

### Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> <li>▶ Containers may still present a chemical hazard/ danger when empty.</li> <li>▶ Return to supplier for reuse/ recycling if possible.</li> </ul> <p>Otherwise:</p> <ul style="list-style-type: none"> <li>▶ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.</li> </ul> <p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.</p> <ul style="list-style-type: none"> <li>▶ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▶ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▶ Recycle wherever possible.</li> <li>▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>▶ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).</li> </ul>
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## SECTION 14 Transport information

### Labels Required

	
Marine Pollutant	

### Land transport (DOT)

## Stat-Rez ESD Nano 275 'A' Medium Gray

<b>UN number</b>	1866	
<b>UN proper shipping name</b>	Resin Solution, flammable	
<b>Transport hazard class(es)</b>	Class	3
	Subrisk	Not Applicable
<b>Packing group</b>	II	
<b>Environmental hazard</b>	Environmentally hazardous	
<b>Special precautions for user</b>	Hazard Label	3
	Special provisions	149, B52, IB2, T4, TP1, TP8

## Air transport (ICAO-IATA / DGR)

<b>UN number</b>	1866	
<b>UN proper shipping name</b>	Resin solution flammable	
<b>Transport hazard class(es)</b>	ICAO/IATA Class	3
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	3L
<b>Packing group</b>	II	
<b>Environmental hazard</b>	Environmentally hazardous	
<b>Special precautions for user</b>	Special provisions	A3
	Cargo Only Packing Instructions	364
	Cargo Only Maximum Qty / Pack	60 L
	Passenger and Cargo Packing Instructions	353
	Passenger and Cargo Maximum Qty / Pack	5 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y341
	Passenger and Cargo Limited Maximum Qty / Pack	1 L

## Sea transport (IMDG-Code / GGVSee)

<b>UN number</b>	1866	
<b>UN proper shipping name</b>	RESIN SOLUTION flammable	
<b>Transport hazard class(es)</b>	IMDG Class	3
	IMDG Subrisk	Not Applicable
<b>Packing group</b>	II	
<b>Environmental hazard</b>	Marine Pollutant	
<b>Special precautions for user</b>	EMS Number	F-E, S-E
	Special provisions	Not Applicable
	Limited Quantities	5 L

## Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

## Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
Titanium Dioxide TiO2	Not Available
carbon black	Not Available
p-toluenesulfonyl isocyanate	Not Available
acetone	Not Available
propylene glycol monoethyl ether acetate - isomers	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available
4-chlorobenzotrifluoride	Not Available
2-ethylhexyl 3,5,5-trimethylhexanoate	Not Available

## Transport in bulk in accordance with the ICG Code

Product name	Ship Type
Titanium Dioxide TiO2	Not Available
carbon black	Not Available

Continued...

## Stat-Rez ESD Nano 275 'A' Medium Gray

Product name	Ship Type
p-toluenesulfonyl isocyanate	Not Available
acetone	Not Available
propylene glycol monoethyl ether acetate - isomers	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available
4-chlorobenzotrifluoride	Not Available
2-ethylhexyl 3,5,5-trimethylhexanoate	Not Available

## SECTION 15 Regulatory information

## Safety, health and environmental regulations / legislation specific for the substance or mixture

## Titanium Dioxide TiO2 is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List	US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	US DOE Temporary Emergency Exposure Limits (TEELs)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans	US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)	US NIOSH Carcinogen List
US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5	US NIOSH Recommended Exposure Limits (RELs)
US - California Proposition 65 - Carcinogens	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List	US OSHA Permissible Exposure Limits (PELs) Table Z-3
US - Massachusetts - Right To Know Listed Chemicals	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US ACGIH Threshold Limit Values (TLV)	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US ACGIH Threshold Limit Values (TLV) - Carcinogens	

## carbon black is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List	US ACGIH Threshold Limit Values (TLV) - Carcinogens
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	US DOE Temporary Emergency Exposure Limits (TEELs)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans	US NIOSH Carcinogen List
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)	US NIOSH Recommended Exposure Limits (RELs)
US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US - California Proposition 65 - Carcinogens	US OSHA Permissible Exposure Limits (PELs) Table Z-3
US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Massachusetts - Right To Know Listed Chemicals	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US ACGIH Threshold Limit Values (TLV)	

## p-toluenesulfonyl isocyanate is found on the following regulatory lists

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory	US TSCA Chemical Substance Inventory - Interim List of Active Substances
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## acetone is found on the following regulatory lists

US - Massachusetts - Right To Know Listed Chemicals	US EPA Integrated Risk Information System (IRIS)
US ACGIH Threshold Limit Values (TLV)	US NIOSH Recommended Exposure Limits (RELs)
US ACGIH Threshold Limit Values (TLV) - Carcinogens	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US DOE Temporary Emergency Exposure Limits (TEELs)	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US Drug Enforcement Administration (DEA) List I and II Regulated Chemicals	US TSCA Section 4/12 (b) - Sunset Dates/Status

## propylene glycol monoethyl ether acetate - isomers is found on the following regulatory lists

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US Clean Air Act - Hazardous Air Pollutants	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US EPCRA Section 313 Chemical List	

## propylene glycol monomethyl ether acetate, alpha-isomer is found on the following regulatory lists

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants	US EPCRA Section 313 Chemical List
US AIHA Workplace Environmental Exposure Levels (WEELs)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US Clean Air Act - Hazardous Air Pollutants	US Toxicology Excellence for Risk Assessment (TERA) Workplace Environmental Exposure Levels (WEEL)
US DOE Temporary Emergency Exposure Limits (TEELs)	US TSCA Chemical Substance Inventory - Interim List of Active Substances

## 4-chlorobenzotrifluoride is found on the following regulatory lists

## Stat-Rez ESD Nano 275 'A' Medium Gray

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

US - California Proposition 65 - Carcinogens

US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens

#### 2-ethylhexyl 3,5,5-trimethylhexanoate is found on the following regulatory lists

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

US TSCA Section 4/12 (b) - Sunset Dates/Status

US TSCA Chemical Substance Inventory - Interim List of Active Substances

## Federal Regulations

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	Yes
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	Yes
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	Yes
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

#### US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
acetone	5000	2270

## State Regulations

#### US. California Proposition 65

**WARNING:** This product can expose you to chemicals including **Titanium Dioxide TiO2, carbon black, 4-chlorobenzotrifluoride**, which are known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	No (propylene glycol monoethyl ether acetate - isomers)
Canada - DSL	No (2-ethylhexyl 3,5,5-trimethylhexanoate)
Canada - NDSL	No (Titanium Dioxide TiO2; carbon black; p-toluenesulfonyl isocyanate; acetone; propylene glycol monoethyl ether acetate - isomers; propylene glycol monomethyl ether acetate, alpha-isomer; 4-chlorobenzotrifluoride)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (propylene glycol monoethyl ether acetate - isomers)
Japan - ENCS	No (propylene glycol monoethyl ether acetate - isomers)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (p-toluenesulfonyl isocyanate; propylene glycol monoethyl ether acetate - isomers; 4-chlorobenzotrifluoride)

## Stat-Rez ESD Nano 275 'A' Medium Gray

National Inventory	Status
Vietnam - NCI	No (2-ethylhexyl 3,5,5-trimethylhexanoate)
Russia - FBEPH	No (propylene glycol monoethyl ether acetate - isomers; 2-ethylhexyl 3,5,5-trimethylhexanoate)
<b>Legend:</b>	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

## SECTION 16 Other information

Revision Date	05/26/2022
Initial Date	09/20/2021

## CONTACT POINT

\*\*PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES\*\*

## SDS Version Summary

Version	Date of Update	Sections Updated
2.6	05/26/2022	Acute Health (inhaled), Advice to Doctor, Chronic Health, Disposal, Engineering Control, Environmental, Exposure Standard, Fire Fighter (fire/explosion hazard), Fire Fighter (fire fighting), Ingredients, Personal Protection (Respirator), Personal Protection (hands/feet), Spills (major), Spills (minor), Storage (storage incompatibility), Supplier Information

## Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

## Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average  
 PC—STEL: Permissible Concentration-Short Term Exposure Limit  
 IARC: International Agency for Research on Cancer  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 STEL: Short Term Exposure Limit  
 TEEL: Temporary Emergency Exposure Limit  
 IDLH: Immediately Dangerous to Life or Health Concentrations  
 ES: Exposure Standard  
 OSF: Odour Safety Factor  
 NOAEL :No Observed Adverse Effect Level  
 LOAEL: Lowest Observed Adverse Effect Level  
 TLV: Threshold Limit Value  
 LOD: Limit Of Detection  
 OTV: Odour Threshold Value  
 BCF: BioConcentration Factors  
 BEI: Biological Exposure Index  
 AIIC: Australian Inventory of Industrial Chemicals  
 DSL: Domestic Substances List  
 NDLS: Non-Domestic Substances List  
 IECSC: Inventory of Existing Chemical Substance in China  
 EINECS: European INventory of Existing Commercial chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 NLP: No-Longer Polymers  
 ENCS: Existing and New Chemical Substances Inventory  
 KECI: Korea Existing Chemicals Inventory  
 NZIoC: New Zealand Inventory of Chemicals  
 PICCS: Philippine Inventory of Chemicals and Chemical Substances  
 TSCA: Toxic Substances Control Act  
 TCSI: Taiwan Chemical Substance Inventory  
 INSQ: Inventario Nacional de Sustancias Químicas  
 NCI: National Chemical Inventory  
 FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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