

# **ICP** Construction Inc.

Version No: 8.15 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 06/20/2022 Print Date: 06/21/2022 S.GHS.USA.EN

#### **SECTION 1 Identification**

## Product Identifier

Product name	Ideapaint Dry Erase Clear Part B-	
Synonyms	Not Available	
Proper shipping name	Corrosive liquid, basic, organic, n.o.s. (contains 3-aminopropyltriethoxysilane and 3-aminopropyldiethoxymethylsilane)	
Other means of identification	Not Available	

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

Relevant identified uses Dry Erase Coating

#### 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	www.icpgroup.com	
Email	sds@icpgroup.com	

#### Emergency phone number

0 1	
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

2 3 1 Note: T of this S Health reactive	he hazard category numbers found in GHS classification in section 2 SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Red = Fire Yellow = Reactivity White = Special (Oxidizer or water s substances)
Classification	Flammable Liquids Category 4, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Oral) Category 4, Sensitisation (Skin) Category 1, Skin Corrosion/Irritation Category 1A
Label elements	
Hazard pictogram(s)	
Signal word	Danger
Hazard statement(s)	
H227	Combustible liquid.
H302	Harmful if swallowed.

H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.

# Hazard(s) not otherwise classified

#### Not Applicable

## Precautionary statement(s) General

• • • •	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

## Precautionary statement(s) Prevention

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P260	Do not breathe dust/fumes/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, protective clothing, eye protection and face protection.

#### Precautionary statement(s) Response

P303+P361+P353	IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower.	
P333+P313	IF Skin irritation or rash occurs: Get medical advice/attention.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P363	Wash contaminated clothing before reuse.	
P301+P312+P330	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth	
P331	Do not induce vomiting.	

# Precautionary statement(s) Storage

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

# Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Not Applicable

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

#### Substances

See section below for composition of Mixtures

# Mixtures

CAS No	%[weight]	Name
3179-76-8	60-80	3-aminopropyldiethoxymethylsilane
919-30-2	10-30	3-aminopropyltriethoxysilane

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		
Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Immediately hold eyelids apart and flush the eye continuously with 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>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>	
Skin Contact	<ul> <li>If skin or hair contact occurs:</li> <li>Immediately flush body and clothes with large amounts of water, using safety shower if available.</li> <li>Quickly remove all contaminated clothing, including footwear.</li> <li>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</li> <li>Transport to hospital, or doctor.</li> </ul>	

Inhalation	<ul> <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> <li>Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.</li> <li>Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).</li> <li>As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.</li> <li>Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.</li> <li>This must definitely be left to a doctor or person authorised by him/her.</li> <li>(ICSC13719)</li> </ul>
Ingestion	<ul> <li>For advice, contact a Poisons Information Centre or a doctor at once.</li> <li>Urgent hospital treatment is likely to be needed.</li> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Transport to hospital or doctor without delay.</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.

For 3-aminopropyltriethoxysilane (APTES)

NOTES:

- Causes chemical burns to skin and eye. Moderately toxic by swallowing.
- May cause acute kidney injury (renal cortical tubular necrosis) by massive peroral overdose or sustained skin contact.
- Due to the severely irritating or corrosive nature of the material, swallowing may lead to ulceration and inflammation of the upper alimentary tract with haemorrhage and fluid loss. Also, perforation of the oesophagus or stomach may occur, leading to mediastinitis or peritonitis and the resultant complications. The stomach should be evacuated carefully in case of ingestion.
- The material reacts immediately with water in the acid contents of the stomach to produce ethanol. Although ethanol production may occur, and there is a potential a potential for nephrotoxicity, because of its intensely irritating effects, it is unlikely that large volumes of this material will be acutely ingested. Therefore, the irritant and aspiration hazards from regurgitation are more serious causes for concern. In view of this, it is recommended that emesis should not be induced in the conscious patient, neither mechanically nor pharmacologically.
- If it is considered necessary to evacuate the stomach contents, this should be undertaken with caution in order to avoid perforation of inflamed or ulcerated areas of the upper alimentary tract, or to avoid aspiration (eg. gastric lavage in the presence of endotracheal intubation).
- For acute or short-term repeated exposures to highly alkaline materials:
- \* Respiratory stress is uncommon but present occasionally because of soft tissue edema
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.

Alkalis continue to cause damage after exposure.

#### INGESTION:

#### Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.

- Neutralising agents should never be given since exothermic heat reaction may compound injury.
- \* Catharsis and emesis are absolutely contra-indicated.

\* Activated charcoal does not absorb alkali.

\* Gastric lavage should not be used.

Supportive care involves the following:

Withhold oral feedings initially.

- ▶ If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).
- SKIN AND EYE:

Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

#### **SECTION 5 Fire-fighting measures**

### Extinguishing media

- Foam.
- Dry chemical powder.

#### Special hazards arising from the substrate or mixture

Fire Incompatibility	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

Fire Fighting	
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Combustion products include:</li> <li>carbon dioxide (CO2)</li> </ul>

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# **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

Minor Spills	<ul> <li>Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material.</li> <li>Check regularly for spills and leaks.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> </ul>

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

# **SECTION 7 Handling and storage**

Precautions for safe handling	
Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>DO NOT store near acids, or oxidising agents</li> <li>No smoking, naked lights, heat or ignition sources.</li> </ul>

# Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Lined metal can, lined metal pail/ can.</li> <li>Plastic pail.</li> <li>For low viscosity materials</li> <li>Drums and jerricans must be of the non-removable head type.</li> <li>Where a can is to be used as an inner package, the can must have a screwed enclosure.</li> </ul>
Storage incompatibility	<ul> <li>Contact with water liberates highly flammable gases</li> <li>Contact with water can cause heating and decomposition</li> <li>Segregate from alcohol, water.</li> <li>Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.</li> <li>Avoid contact with copper, aluminium and their alloys.</li> <li>Avoid contamination with water, alkalies and detergent solutions.</li> <li>Material reacts with water and generates gas, pressurises containers with even drum rupture resulting.</li> <li>Avoid reaction with oxidising agents</li> </ul>

# **SECTION 8 Exposure controls / personal protection**

#### **Control parameters**

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

# Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
3-aminopropyldiethoxymethylsilane	13 mg/m3	140 mg/m3		860 mg/m3
3-aminopropyltriethoxysilane	1.9 mg/m3	21 mg/m3		350 mg/m3
Ingradiant	Original IDLU			
ingreaterit			Revised IDLH	
3-aminopropyldiethoxymethylsilane	Not Available		Not Available	
3-aminopropyldiethoxymethylsilane 3-aminopropyltriethoxysilane	Not Available Not Available		Not Available Not Available	

Occupational Exposure Banding			
Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
3-aminopropyltriethoxysilane	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		

occupational Exposure Band Elinit
he output of this process is an occupational exposure band (OEB), which corresponds to a protect worker health.
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#### Exposure controls

Appropriate engineering controls	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.	
Personal protection		
Eye and face protection	<ul> <li>Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.</li> <li>Chemical goggles.whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted.</li> </ul>	
Skin protection	See Hand protection below	
Hands/feet protection	<ul> <li>Elbow length PVC gloves</li> <li>When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.</li> <li>NOTE:</li> <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> </ul>	
Body protection	See Other protection below	
Other protection	<ul> <li>Overalls.</li> <li>PVC Apron.</li> </ul>	

#### **Respiratory protection**

Type KAX-P 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

#### **SECTION 9** Physical and chemical properties

## Information on basic physical and chemical properties

Appearance	Not Available		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	>11	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	85	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Combustible.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</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	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane. Inhalation of amine vapours may cause irritation of the mucous membrane of the nose and throat, and lung irritation with respiratory distress and cough. Swelling and inflammation of the respiratory tract is seen in serious cases; with headache, nausea, faintness and anxiety. Inhalation hazard is increased at higher temperatures. 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.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhoea may follow. Amines without benzene rings when swallowed are absorbed throughout the gut. Corrosive action may cause damage throughout the gastrointestinal tract.
Skin Contact	The material can produce severe chemical burns following direct contact with the skin. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Skin contact with alkaline corrosives may produce severe pain and burns; brownish stains may develop. The corroded area may be soft, gelatinous and necrotic; tissue destruction may be deep. Volatile amine vapours produce irritation and inflammation of the skin. Direct contact can cause burns. Open cuts, abraded or irritated skin should not be exposed to this material 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.
Eye	If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Vapours of volatile amines irritate the eyes, causing excessive secretion of tears, inflammation of the conjunctiva and slight swelling of the cornea, resulting in 'halos' around lights. This effect is temporary, lasting only for a few hours. The material can produce severe chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. 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. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.

Ideapaint Dry Erase Clear Part B-	ΤΟΧΙCITY	IRRITATION		
THIS	Not Available Not		lot Available	
	тохісіту	IRRITATI	ION	
3-aminopropyldiethoxymethylsilane	Dermal (rabbit) LD50: 2308.32 mg/kg <sup>[2]</sup>	Skin (rab	Skin (rabbit):10 mg/24h(open)mild	
	Oral (Rat) LD50; 4360.16 mg/kg <sup>[2]</sup>			
	ΤΟΧΙΟΙΤΥ	IRRITATION	N	
3-aminopropyltriethoxysilane	Dermal (rabbit) LD50: 4000 mg/kg <sup>[2]</sup>	Eye (rabbit):	: 0.75 mg/24h-SEVERE	
	Inhalation(Rat) LC50; >7.35 mg/l4h <sup>[1]</sup>	Eye (rabbit):	: 100 mg - mild	
	Oral (Rat) LD50; 1750 mg/kg <sup>[2]</sup>		Skin (rabbit): 0.1 mg - mild	
		Skin (rabbit)	): 5.0 mg/24h-SEVERE	
Legend: 1	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise			

3-AMINOPROPYLDIETHOXYMETHYLSILANE The material may caus the production of vesic		The material may cause skin irritation aft the production of vesicles, scaling and the	er prolonged or repeated exposure ar ickening of the skin.	nd may produce on contact skin redness, swelling,
3-AMINOPROPYLTRIETHOXYSILANE		The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause severe 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. Repeated exposures may produce severe ulceration. Overexposure to most of these materials may cause adverse health effects. Many amine-based compounds can cause release of histamines, which, in turn, can trigger allergic and other physiological effects, including constriction of the bronchi or asthma and inflammation of the cavity of the nose. Whole-body symptoms include headache, nausea, faintness, anxiety, a decrease in blood pressure, rapid heartbeat, itching, reddening of the skin, urticaria (hives) and swelling of the face, which are usually transient. There are generally four routes of possible or potential exposure: inhalation, skin contact, eye contact, and swallowing. Inhalation: Inhaling vapours may result in moderate to severe irritation of the tissues of the nose and throat and can irritate the lungs. 3-aminopropyltriethoxysilane (APTES) is severely irritating to the skin and eyes. Animal testing showed that prolonged exposure by inhalation and inflammation of the caproes in the cell nattern on the airway.		
Ideapaint Dry Erase Clear Part B- THIS & 3-AMINOPROPYLDIETHOXYMETHYLSILANE & 3-AMINOPROPYLTRIETHOXYSILANE		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.		
Ideapaint Dry Erase Clear Part B- THIS & 3-AMINOPROPYLTRIETHOXYSILANE		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. Low molecular weight alkoxysilane can cause irreversible lung damage when inhaled at low dose. It is not an obvious skin irritant.		
Acute Toxicity	<b>~</b>		Carcinogenicity	×
Skin Irritation/Corrosion	~		Reproductivity	×

Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		Legend: 🗙 – Data either not	available or does not fill the criteria for classification

Data available to make classification

# **SECTION 12 Ecological information**

deapaint Dry Erase Clear Part B-	Endpoint	Test Duration (hr)	Species	Value	Sour	се
THIS	Not Available Not Available		Not Available	Not Available	Not Available	
	Endpoint	Test Duration (hr)	Species		Value	Source
	EC50	72h	Algae or other aquatic pla	ants	603mg/l	2
3-aminopropyldiethoxymethylsilane	NOEC(ECx)	72h	Algae or other aquatic plants		1.3mg/l	2
	EC50	48h	Crustacea		331mg/l	2
	LC50	96h	Fish		>934mg/l	2
	Endpoint	Test Duration (hr)	Species		Value	Source
	BCF	672h	Fish		<0.53	7
<b>0</b>	NOEC(ECx)	72h	Algae or other aquatic plants		1.3mg/l	2
3-aminopropyltriethoxysilane	EC50	72h	Algae or other aquatic plants		603mg/l	2
	EC50	48h	Crustacea		331mg/l	2
	1.050	96b	Fish		>934mg/l	2

Alkoxysilanes are highly toxic to algae and moderately toxic to aquatic invertebrates. e.g. the daphnid 48 hour LC50 for dimethyldiethoxysilane is 1.25 mg/l, and the 15-day algal EC50 for a number of alkoxysilanes is approximately 10 mg/l.

For 3-aminopropyltriethoxsilane (APTES):

Environmental Fate: Photodegradation modeling indicates the halflife in the atmosphere due to the reaction with photochemically induced OH radicals to be approximately 2.4 hours. However, photodegradation as a mode of removal is unlikely and not expected to be a significant degradation process because APTES is unstable in water (t1/2 < 1 hour) over a range of environmentally relevant pH and temperature conditions, with the exception of pH 7 at 10 or 24.7 C. At pH 7, the half-life is 56 or 8.4 hours, for 10 or 24.7 C, respectively. Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
3-aminopropyldiethoxymethylsilane	HIGH	HIGH
3-aminopropyltriethoxysilane	HIGH	HIGH

Ingredient	Bioaccumulation
3-aminopropyldiethoxymethylsilane	LOW (LogKOW = 1.0784)
3-aminopropyltriethoxysilane	LOW (BCF = 5.4)

# Mobility in soil

Ingredient	Mobility
3-aminopropyldiethoxymethylsilane	LOW (KOC = 3315)
3-aminopropyltriethoxysilane	LOW (KOC = 12150)

# **SECTION 13 Disposal considerations**

Waste treatment methods	
Product / Packaging disposal	<ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</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> </ul>

# **SECTION 14 Transport information**

# Labels Required



Marine Pollutant

# Land transport (DOT)

UN number	3267	3267		
UN proper shipping name	Corrosive liquid, basic,	Corrosive liquid, basic, organic, n.o.s. (contains 3-aminopropyltriethoxysilane and 3-aminopropyldiethoxymethylsilane)		
Transport hazard class(es)	Class 8 Subrisk Not Appl	icable		
Packing group	II	II		
Environmental hazard	Not Applicable			
Special precautions for user	Hazard Label Special provisions	8 B2, IB2, T11, TP2, TP27		

#### Air transport (ICAO-IATA / DGR)

• •				
UN number	3267	3267		
UN proper shipping name	Corrosive liquid, basic, o	rganic, n.o.s. * (contains 3-aminopropyl	triethoxysilane and	J 3-aminopropyldiethoxymethylsilane)
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	8 Not Applicable 8L		
Packing group	П	11		
Environmental hazard	Not Applicable			
Special precautions for user	Special provisions Cargo Only Packing In Cargo Only Maximum Passenger and Cargo Passenger and Cargo Passenger and Cargo Passenger and Cargo	astructions Qty / Pack Packing Instructions Maximum Qty / Pack Limited Quantity Packing Instructions Limited Maximum Qty / Pack	A3 A803 855 30 L 851 1 L Y840 0.5 L	

# Sea transport (IMDG-Code / GGVSee)

UN number	3267
UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains 3-aminopropyltriethoxysilane and 3-aminopropyldiethoxymethylsilane)

Transport hazard class(es)	IMDG Class IMDG Subrisk	8 Not Applicable	
Packing group	I		
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number Special provisions Limited Quantities	F-A, S-B 274 1 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
3-aminopropyldiethoxymethylsilane	Not Available
3-aminopropyltriethoxysilane	Not Available

#### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
3-aminopropyldiethoxymethylsilane	Not Available
3-aminopropyltriethoxysilane	Not Available

#### **SECTION 15 Regulatory information**

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

## 3-aminopropyldiethoxymethylsilane is found on the following regulatory lists

US DOE Temporary Emergency Exposure Limits (TEELs)

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

US TSCA Chemical Substance Inventory - Interim List of Active Substances

#### 3-aminopropyltriethoxysilane is found on the following regulatory lists

US DOE Temporary Emergency Exposure Limits (TEELs) US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

#### Federal Regulations

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	
Gas under pressure	
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	No
Acute toxicity (any route of exposure)	Yes
Reproductive toxicity	No
Skin Corrosion or Irritation	
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	
Aspiration Hazard	
Germ cell mutagenicity	
Simple Asphyxiant	
Hazards Not Otherwise Classified	

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4) None Reported

#### State Regulations

#### US. California Proposition 65

None Reported

#### **National Inventory Status**

National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	Yes		
Canada - DSL	Yes		
Canada - NDSL	No (3-aminopropyldiethoxymethylsilane; 3-aminopropyltriethoxysilane)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	No (3-aminopropyldiethoxymethylsilane)		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	No (3-aminopropyldiethoxymethylsilane)		
Vietnam - NCI	Yes		
Russia - FBEPH	Yes		
Legend:	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	06/20/2022
Initial Date	07/08/2021

#### CONTACT POINT

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

#### **SDS Version Summary**

Version	Date of Update	Sections Updated
7.15	06/20/2022	Physical Properties, 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.

#### **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 NDSL: 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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