

ICP Construction

Version No: 4.7

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

SECTION 1 IDENTIFICATION

Product Identifier

| Product name | Novus Acrylic DTM Primer & Finish (F)-White F10600 | | | |
|---|--|--|--|--|
| Synonyms | ot Available | | | |
| Other means of identification | Not Available | | | |
| Recommended use of the chemical and restrictions on use | | | | |
| Relevant identified uses | DTM Primer and Finish | | | |

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

| Registered company name | ICP Construction | | | | |
|-------------------------|--|--|--|--|--|
| Address | 150 Dascomb Road Massachusetts Andover United States | | | | |
| Telephone | 978-623-9980 | | | | |
| Fax | Not Available | | | | |
| Website | Not Available | | | | |
| Email | Not Available | | | | |

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 subst | ance or mixture | | | | | |
|-----------------------------|--|--|--|--|--|--|
| Classification | Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2 | | | | | |
| Label elements | | | | | | |
| GHS label elements | | | | | | |
| SIGNAL WORD | NOT APPLICABLE | | | | | |
| Hazard statement(s) | | | | | | |
| H411 | Toxic to aquatic life with long lasting effects. | | | | | |
| Hazard(s) not otherwise s | pecified | | | | | |
| Not Applicable | | | | | | |
| Precautionary statement(s |) Prevention | | | | | |
| P273 | Avoid release to the environment. | | | | | |
| Precautionary statement(s |) Response | | | | | |
| P391 | Collect spillage. | | | | | |
| Precautionary statement(s | | | | | | |

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Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|------------|-----------|---------------------------------|
| 1317-70-0 | | titanium dioxide (anatase) |
| 56709-13-8 | 0.2 | azadioxabicyclooctane, isomer 1 |
| 97-88-1 | 0.02 | n-butyl methacrylate |
| 9036-19-5 | 0.05 | octylphenol, ethoxylated |
| 1897-45-6 | 0.08 | chlorothalonil |
| 471-34-1 | 0.06 | calcium carbonate |
| 1314-13-2 | 4.2 | zinc oxide |
| not avail. | 58.2 | Non-hazardous ingredient |
| 57-55-6 | 1.7 | propylene glycol |
| 7631-86-9 | NotSpec. | silica amorphous |
| 7664-41-7 | 0.16 | ammonia anhydrous liquefied |
| 1330-20-7 | <0.04 | xylene |
| 100-41-4 | 0.01 | ethylbenzene |

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

| Eye Contact | If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|---|
| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
| Inhalation | If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. |
| Ingestion | If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol. |

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 acute or short term repeated exposures to xylene

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice. BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant Methylhippu-ric acids in urine

Index 1.5 gm/gm creatinine Sampling Time End of shift

Comments

2 mg/min

Last 4 hrs of shift

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

There is no restriction on the type of extinguisher which may be used.

• Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

| Fire Incompatibility | None known. |
|---------------------------|---------------------------------------|
| Special protective equipm | ent and precautions for fire-fighters |

| Special protective equipment and precautions for fire-fighters | | | | |
|--|--|--|--|--|
| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. | | | |
| Fire/Explosion Hazard | Non combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes. | | | |

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 | Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. |
|--------------|--|
| Major Spills | Environmental hazard - contain spillage. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. |

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

| Safe handling | Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. DO NOT allow clothing wet with material to stay in contact with skin |
|-------------------|---|
| Other information | |

Conditions for safe storage, including any incompatibilities

| Suitable container | Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. |
|-------------------------|--|
| Storage incompatibility | Xylenes: may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride attack some plastics, rubber and coatings may generate electrostatic charges on flow or agitation due to low conductivity. Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. Aromatics can react exothermically with bases and with diazo compounds. For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring. Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids. None known |

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| INGREDIENT DATA | | | | | | |
|---|-----------------------------------|---|---|----------------------|-------------------|---|
| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | titanium dioxide (anatase) | Titanium dioxide | 15 mg/m3 | Not Available | Not Available | Total dust |
| US ACGIH Threshold Limit Values (TLV) | titanium dioxide (anatase) | Titanium dioxide | 10 mg/m3 | Not Available | Not Available | TLV® Basis: LRT irr |
| US NIOSH Recommended Exposure Limits (RELs) | titanium dioxide (anatase) | Rutile, Titanium oxide, Titanium peroxide | Not Available | Not Available | Not Available | Ca See Appendix A |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | calcium carbonate | Calcium carbonate / Calcium carbonate - Respirable fraction | 15 mg/m3 / 5 mg/m3 | Not Available | Not Available | Total dust |
| US NIOSH Recommended Exposure Limits (RELs) | calcium carbonate | Calcium carbonate, Natural calcium carbonate [Note: Calcite & aragonite are commercially important natural calcium carbonates.] / Calcium carbonate [Note: Marble is a metamorphic form of calcium carbonate.] | 10 (total), 5 (resp) mg/m3 | Not Available | Not Available | Not Available |
| US NIOSH Recommended Exposure Limits (RELs) | calcium carbonate | Calcium salt of carbonic acid [Note: Occurs in nature as as limestone, chalk, marble, dolomite, aragonite, calcite and oyster shells.] | 10 (total), 5 (resp) mg/m3 | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | zinc oxide | Zinc oxide fume / Zinc oxide / Zinc oxide - Respirable fraction | 5 mg/m3 / 15 mg/m3 | Not Available | Not Available | Total dust |
| US OSHA Permissible Exposure Levels (PELs) - Table Z3 | zinc oxide | Inert or Nuisance Dust | 5 mg/m3 / 15 mg/m3 / 15 mppcf / 50 mppcf | Not Available | Not Available | Respirable fraction;All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1. / Total dust;All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1. |
| US ACGIH Threshold Limit Values (TLV) | zinc oxide | Zinc oxide | 2 mg/m3 | 10 mg/m3 | Not Available | TLV® Basis: Metal fume fever |
| US NIOSH Recommended Exposure Limits (RELs) | zinc oxide | Zinc peroxide | Dust: 5 ,Fume: 5 mg/m3 | Fume: 10 mg/m3 | Dust: 15 mg/m3 | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | silica amorphous | Silica, amorphous, precipitated and gel | Not Available | Not Available | Not Available | See Table Z-3 |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | silica amorphous | Silica, fused, respirable dust | Not Available | Not Available | Not Available | See Table Z-3 |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | silica amorphous | Silica, amorphous, diatomaceous earth | Not Available | Not Available | Not Available | See Table Z-3;containing less than 1% crystalline silica |
| US OSHA Permissible Exposure Levels (PELs) - Table Z3 | silica amorphous | Amorphous | 80/(%SiO2) mg/m3 / 20 mppcf | Not Available | Not Available | including natural diatomaceous earth |
| US NIOSH Recommended Exposure Limits (RELs) | silica amorphous | Diatomaceous earth, Diatomaceous silica, Diatomite, Precipitated amorphous silica, Silica gel, Silicon dioxide (amorphous) | 6 mg/m3 | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | ammonia anhydrous liquefied | Ammonia | 35 mg/m3 / 50 ppm | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | ammonia anhydrous liquefied | Ammonia | 25 ppm | 35 ppm | Not Available | TLV® Basis: Eye dam; URT irr |
| US NIOSH Recommended Exposure Limits (RELs) | ammonia anhydrous liquefied | Anhydrous ammonia, Aqua ammonia, Aqueous ammonia [Note: Often used in an aqueous solution.] | 18 mg/m3 / 25 ppm | 27 mg/m3 / 35 ppm | Not Available | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | xylene | Xylenes (o-, m-, p-isomers) | 435 mg/m3 / 100 ppm | Not Available | Not Available | Not Available |

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| US ACGIH Threshold Limit Values (TLV) | xylene | Xylene (all isomers) | 100 ppm | 150 ppm | Not Available | TLV® Basis: URT & | & eye irr; CNS imp | oair; BEI |
|---|--|--------------------------------|------------------------|---------------------------|------------------|--|--------------------|---------------|
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | ethylbenzene | Ethyl benzene | 435 mg/m3 / 100 ppm | Not Available | Not Available | Not Available | | |
| US ACGIH Threshold Limit Values (TLV) | ethylbenzene | Ethyl benzene | 20 ppm | Not Available | Not Available | TLV® Basis: URT ir cochlear impair; BE | | phropathy); |
| US NIOSH Recommended Exposure Limits (RELs) | ethylbenzene | Ethylbenzol, Phenylethane | 435 mg/m3 / 100 ppm | 545 mg/m3 / 125 ppm | Not Available | Not Available | | |
| EMERGENCY LIMITS | | | | | | | | |
| Ingredient | Material name | Material name | | | | TEEL-1 | TEEL-2 | TEEL-3 |
| titanium dioxide (anatase) | Titanium oxide; (| (Titanium dioxide) | | | | 30 mg/m3 | 330 mg/m3 | 2,000 mg/m3 |
| n-butyl methacrylate | Methyl butylacry | late, 2-; (Butyl methacrylate) | | | | 19 mg/m3 | 210 mg/m3 | 1,300 mg/m3 |
| octylphenol, ethoxylated | Polyoxyethylene | monooctylphenyl ether | | | | 13 mg/m3 | 140 mg/m3 | 830 mg/m3 |
| chlorothalonil | Chlorothalonil; (| Tetrachloroisophthalonitrile) | | | | 0.13 mg/m3 | 1.4 mg/m3 | 8.6 mg/m3 |
| calcium carbonate | Limestone; (Cale | cium carbonate; Dolomite) | | | | 45 mg/m3 | 500 mg/m3 | 3,000 mg/m3 |
| calcium carbonate | Carbonic acid, c | calcium salt | | | | 45 mg/m3 | 210 mg/m3 | 1,300 mg/m3 |
| zinc oxide | Zinc oxide | | | | | 10 mg/m3 | 15 mg/m3 | 2,500 mg/m3 |
| propylene glycol | Propylene glyco | l; (1,2-Propanediol) | | | | 30 mg/m3 | 1,300 mg/m3 | 7,900 mg/m3 |
| silica amorphous | Silica gel, amorp | phous synthetic | | | | 18 mg/m3 | 200 mg/m3 | 1,200 mg/m3 |
| silica amorphous | Silica, amorphou | Silica, amorphous fumed | | | | | 100 mg/m3 | 630 mg/m3 |
| silica amorphous | Siloxanes and silicones, dimethyl, reaction products with silica; (Hydrophobic silicon dioxide, amorphous) | | | | | ıs) 120 mg/m3 | 1,300 mg/m3 | 7,900 mg/m3 |
| silica amorphous | Silica, amorphous fume | | | | | 45 mg/m3 | 500 mg/m3 | 3,000 mg/m3 |
| silica amorphous | Silica amorphous hydrated | | | | | 18 mg/m3 | 220 mg/m3 | 1,300 mg/m3 |
| ammonia anhydrous liquefied | Ammonia | | | | | Not Available | Not Available | Not Available |
| xylene | Xylenes | Xylenes | | | | Not Available | Not Available | Not Available |
| ethylbenzene | Ethyl benzene | | | | | Not Available | Not Available | Not Available |
| Ingredient | Original IDLH | | | | Revise | ed IDLH | | |
| titanium dioxide (anatase) | N.E. mg/m3 / N. | E. ppm | | | 5,000 r | mg/m3 | | |
| azadioxabicyclooctane, isomer 1 | Not Available | | | | Not Av | vailable | | |
| n-butyl methacrylate | Not Available | | | | Not Av | /ailable | | |
| octylphenol, ethoxylated | Not Available | | | | Not Av | ailable | | |
| chlorothalonil | Not Available | | | | Not Av | ailable | | |
| calcium carbonate | Not Available | | | | Not Av | ailable | | |
| zinc oxide | 2,500 mg/m3 500 mg/m3 | | | | | | | |
| Non-hazardous ingredient | Not Available | | | | Not Av | ailable | | |
| propylene glycol | Not Available | | | | Not Av | ailable | | |
| silica amorphous | N.E. mg/m3 / N. | E. ppm | | | 3,000 n | ng/m3 | | |
| ammonia anhydrous liquefied | 500 ppm | | | | 300 ppi | m | | |
| xylene | 1,000 ppm | | | | | | | |
| ethylbenzene | 2,000 ppm | | | | 800 [LE | 800 [LEL] ppm | | |

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. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. |
|-------------------------------------|--|
| Personal protection | |
| Eye and face protection | Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. |
| Skin protection | See Hand protection below |
| Hands/feet protection | Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber 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. 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. |

| Body protection | See Other protection below |
|------------------|--|
| Other protection | ▶ Overalls. ▶ P.V.C. apron. |
| Thermal hazards | Not Available |

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Text | | |
|---|---------------|--|---------------|
| | | | |
| 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) | Not Available | 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) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Available | 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 (g/L) | Immiscible | pH as a solution (1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
|-------------------------------------|--|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| 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 is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers. Xylene is a central nervous system depressant | | |
|---------------------------|--|---------------|--|
| Ingestion | Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) The material has NOT 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. | | |
| Skin Contact | 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. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. | | |
| Eye | Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). | | |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity. | | |
| Novus Acrylic DTM Primer | ΤΟΧΙΟΙΤΥ | IRRITATION | |
| & Finish (F)-White F10600 | Not Available | Not Available | |

| | | IRRITATION | | |
|------------------------------------|--|------------------------------------|--|--|
| | Inhalation (rat) LC50: >2.28 mg/l/4hr ^[1] | Not Available | | |
| | Inhalation (rat) LC50: >3.56 mg/l/4hr ^[1] | | | |
| titanium dioxide (anatase) | Inhalation (rat) LC50: >6.82 mg/l/4hr ^[1] | | | |
| | Inhalation (rat) LC50: 3.43 mg/l/4hr ^[1] | | | |
| | Inhalation (rat) LC50: 5.09 mg/l/4hr ^[1] | | | |
| | Oral (rat) LD50: >2000 mg/kg ^[1] | | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| azadioxabicyclooctane, isomer 1 | Dermal (rabbit) LD50: >2000 mg/kg ^[2] | Not Available | | |
| Isomeri | Oral (rat) LD50: 2950 mg/kg ^[2] | | | |
| | тохісіту | IRRITATION | | |
| | Dermal (rabbit) LD50: 11300 mg/kg ^[2] | Skin (rabbit): 10000 mg/kg (open) | | |
| n-butyl methacrylate | Inhalation (rat) LC50: 4910 ppm/4hr ^[2] | | | |
| | Oral (rat) LD50: 16000 mg/kg ^[2] | | | |
| | | i | | |
| octylphenol, ethoxylated | TOXICITY | IRRITATION | | |
| corylphonol, culoxylated | Oral (rat) LD50: 4280 mg/kg ^[2] | Eye (rabbit): 1% SEVERE | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| | dermal (rat) LD50: >2500 mg/kg ^[2] | Not Available | | |
| chlorothalonil | Inhalation (rat) LC50: 0.1 mg/l/4h. ^[2] | | | |
| | Inhalation (rat) LC50: 0.31 mg/L/1hr ^[2] | | | |
| | Oral (rat) LD50: 10000 mg/kg ^[2] | | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| calcium carbonate | dermal (rat) LD50: >2000 mg/kg ^[1] | Eye (rabbit): 0.75 mg/24h - SEVERE | | |
| | Oral (rat) LD50: >2000 mg/kg ^[1] | Skin (rabbit): 500 mg/24h-moderate | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| zinc oxide | Oral (rat) LD50: >5000 mg/kg ^[1] | Eye (rabbit) : 500 mg/24 h - mild | | |
| | | Skin (rabbit) : 500 mg/24 h- mild | | |
| | тохісіту | IRRITATION | | |
| Non-hazardous ingredient | Not Available | Not Available | | |
| | тохісіту | IRRITATION | | |
| | Dermal (rabbit) LD50: >2000 mg/kg ^[1] | Eye (rabbit): 100 mg - mild | | |
| propylene glycol | Oral (rat) LD50: 20000 mg/kg ^[2] | Eye (rabbit): 500 mg/24h - mild | | |
| | | Skin(human):104 mg/3d Intermit Mod | | |
| | | Skin(human):500 mg/7days mild | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| | Dermal (rabbit) LD50: >2000 mg/kg ^[1] | Eye (rabbit): non-irritating * | | |
| silica amorphous | Inhalation (rat) LC50: >0.139 mg/l/14hr * ^[2] | Skin (rabbit): non-irritating * | | |
| | Oral (rat) LD50: 3160 mg/kg ^[2] | | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | | |
| | dermal (rat) LD50: 4.84 mg/L ^[2] | Not Available | | |
| ammonia anhydrous | Inhalation (rat) LC50: 2000 ppm/4hr ^[2] | | | |
| liquefied | Inhalation (rat) LC50: 9500 ppm/1hr ^[2] | | | |
| | Oral (rat) LD50: 350 mg/kg ^[1] | | | |
| | тохісіту | IRRITATION | | |
| | Dermal (rabbit) LD50: >1700 mg/kg ^[2] | Eye (human): 200 ppm irritant | | |
| xylene | Inhalation (rat) LC50: 5000 ppm/4hr ^[2] | Eye (rabbit): 5 mg/24h SEVERE | | |
| | | | | |

| | Novus Acrylic DTM Primer & Finish (F |)-White F10600 | | |
|------------------------------------|--|---|--|--|
| | | | | |
| | Oral (rat) LD50: 4300 mg/kg ^[2] | Eye (rabbit): 87 mg mild | | |
| | | Skin (rabbit):500 mg/24h moderate | | |
| | TOXICITY | IRRITATION | | |
| | Dermal (rabbit) LD50: ca.15432.6 mg/kg ^[1] | Eye (rabbit): 500 mg - SEVERE | | |
| ethylbenzene | Inhalation (mouse) LC50: 35.5 mg/L/2hr ^[2] | Skin (rabbit): 15 mg/24h mild | | |
| | Inhalation (rat) LC50: 55 mg/L/2hr ^[2] | | | |
| | Oral (rat) LD50: 3500 mg/kg ^[2] | | | |
| Legend: | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2 extracted from RTECS - Register of Toxic Effect of chemical Substances | * Value obtained from manufacturer's SDS. Unless otherwise specified data | | |
| TITANIUM DIOXIDE (ANATASE) | Exposure to titanium dioxide is via inhalation, swallowing or skin contact. Whe the lungs and immune system. Absorption by the stomach and intestines depe | en inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of ends on the size of the particle. | | |
| AZADIOXABICYCLOOCTANE, ISOMER 1 | For azadioxabicyclooctanes: The acute oral and dermal toxicities of azadioxabicyclooctane are low. The acute inhalation toxicity showed a median lethal dose range of between 0.441 mg/L and 0.819 mg/L in males, and between 0.819 mg/L and 1.397 mg/L in females, with epistaxis, labored breathing, rales, and rhinorrhoea in all dose groups. Corneal opacity was observed in the primary eye irritation study resulting . * CCInfo | | | |
| N-BUTYL METHACRYLATE | Where no "official" classification for acrylates and methacrylates exists, there has been cautious attempts to create classifications in the absence of contrary evidence. For example Monalkyl or monoarylesters of acrylic acids should be classified as R36/37/38 and R51/53 Monoalkyl or monoarylesters of methacrylic acid should be classified as R36/37/38 For isobutyl methacrylates (i-BMA) and n-butyl methacrylates (n-BMA): These have low levels of toxicity orally, through skin contact or by inhalation. They irritate the skin and eyes. They have not been shown to cause genetic damage or cancer, and there is little concern about them causing developmental toxicity. Based on the available oncogenicity data and without a better understanding of the carcinogenic mechanism the Health and Environmental Review Division (HERD), Office of Toxic Substances (OTS), of the US EPA previously concluded that all chemicals that contain the acrylate moiety (CH2=CHCOO or CH2=C(CH3)COO) should be considered to be a carcinogenic hazard unless shown otherwise by adequate testing. This position has now been revised and acrylates are no longer <i>de facto</i> carcinogens. | | | |
| OCTYLPHENOL, ETHOXYLATED | Octoxynols: Octoxynols of various chain lengths as well as octoxynol salts and organic acids function in cosmetics either as surfactants-emulsifying agents, surfactants- cleansing agents, surfactant-solubilizing agents, or surfactants-hydrotropes in a wide variety of cosmetic products at concentrations ranging from 0.0008% to 25%, with most less than 5.0%. The octoxynols are chemically similar to nonoxynols. Long-chain nonoxynols (9 and above) were considered safe as used, whereas short-chain nonoxynols (8 and below) were considered safe as used in rinse-off products and safe at concentrations less than 5% in leave-on formulations. Human beings have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents, and other cleaning products . Exposure to these chemicals can occur through ingestion, inhalation, or contact with the skin or eyes. Studies of acute toxicity show that volumes well above a reasonable intake level would have to occur to produce any toxic response. Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed. Tri-ethylene glycol ethers undergo enzymatic oxidation to toxic alkoxy acids. They may irritate the skin and the eyes. At high oral doses, they may cause depressed reflexes, flaccid muscle tone, breathing difficulty and coma. | | | |
| CHLOROTHALONIL | Chlorothalonil has low toxicity, according to animal testing. It irritates the skin and eye. Animal testing suggests that at sufficient doses it can cause cancer of the kidney and forestomach. ADI: 0.01 mg/kg/day NOEL: 1.5 mg/kg/day | | | |
| CALCIUM CARBONATE | No evidence of carcinogenic properties. No evidence of mutagenic or teratog | jenic effects. | | |
| PROPYLENE GLYCOL | The acute oral toxicity of propylene glycol is very low, and large quantities are required to cause perceptible health damage in humans. Serious toxicity generally occurs only at plasma concentrations over 1 g/L, which requires extremely high intake over a relatively short period of time. It would be nearly impossible to reach toxic levels by consuming foods or supplements, which contain at most 1 g/ka of PG. | | | |
| SILICA AMORPHOUS | Impossible to reach toxic levels by consuming foods or supplements, which contain at most 1 g/kg of PG. For silica amorphous: When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. If swallowed, the vast majority of SAS is excreted in the faeces and there is little accumulation in the body. Following absorption across the gut, SAS is eliminated via urine without modification in animals and humans. Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS] | | | |
| | | | | |

No significant acute toxicological data identified in literature search.

irritate the skin, eyes and may cause hearing loss if exposed to high doses.

involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

Reproductive effector in rats

AMMONIA ANHYDROUS LIQUEFIED

ETHYLBENZENE

AZADIOXABICYCLOOCTANE, ISOMER 1 & N-BUTYL METHACRYLATE & CHLOROTHALONIL

AZADIOXABICYCLOOCTANE, ISOMER 1 & N-BUTYL METHACRYLATE & CHLOROTHALONIL & CALCIUM CARBONATE & AMMONIA ANHYDROUS LIQUEFIED

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant.

Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out through urine. It may

NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA.

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema

Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded.

The following information refers to contact allergens as a group and may not be specific to this product.

| OCTYLPHENOL, ETHOXYLATED & CALCIUM CARBONATE & XYLENE & ETHYLBENZENE | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. | | | |
|--|--|------------------------|--|--|
| CHLOROTHALONIL & ETHYLBENZENE | WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. | | | |
| CALCIUM CARBONATE & ZINC OXIDE & PROPYLENE GLYCOL & XYLENE & ETHYLBENZENE | 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. | | | |
| SILICA AMORPHOUS & XYLENE | The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. | | | |
| Acute Toxicity | \otimes | Carcinogenicity | 0 | |
| Skin Irritation/Corrosion | 0 | Reproductivity | 0 | |
| Serious Eye Damage/Irritation | 0 | STOT - Single Exposure | 0 | |
| Respiratory or Skin sensitisation | STOT - Repeated Exposure | | | |
| Mutagenicity | 0 | Aspiration Hazard | 0 | |
| | | | - Data available but does not fill the criteria for classification | |

✓ – Data available to make classification
 ○ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

| Ingredient | Endpoint | Test Duration (hr) | Species | Value | Source |
|------------------------------------|----------|--------------------|-------------------------------|----------------|--------|
| titanium dioxide (anatase) | LC50 | 96 | Fish | 9.214mg/L | 3 |
| titanium dioxide (anatase) | EC50 | 48 | Crustacea | >10mg/L | 2 |
| titanium dioxide (anatase) | EC50 | 72 | Algae or other aquatic plants | 5.83mg/L | 4 |
| titanium dioxide (anatase) | EC20 | 72 | Algae or other aquatic plants | 1.81mg/L | 4 |
| titanium dioxide (anatase) | NOEC | 336 | Fish | 0.089mg/L | 4 |
| azadioxabicyclooctane, isomer 1 | LC50 | 96 | Fish | 28073.682mg/L | 3 |
| azadioxabicyclooctane, isomer 1 | EC50 | 96 | Algae or other aquatic plants | 503.941mg/L | 3 |
| azadioxabicyclooctane, isomer 1 | LC50 | 96 | Fish | 7479.033mg/L | 3 |
| azadioxabicyclooctane, isomer 1 | EC50 | 96 | Algae or other aquatic plants | 193.440mg/L | 3 |
| n-butyl methacrylate | LC50 | 96 | Fish | 5.478mg/L | 3 |
| n-butyl methacrylate | EC50 | 48 | Crustacea | 32mg/L | 1 |
| n-butyl methacrylate | EC50 | 96 | Algae or other aquatic plants | 57mg/L | 1 |
| n-butyl methacrylate | EC50 | 504 | Crustacea | 6.59mg/L | 2 |
| n-butyl methacrylate | NOEC | 336 | Fish | 0.78mg/L | 2 |
| octylphenol, ethoxylated | LC50 | 96 | Fish | 7.2mg/L | 4 |
| octylphenol, ethoxylated | EC50 | 96 | Algae or other aquatic plants | 0.21mg/L | 4 |
| octylphenol, ethoxylated | EC50 | 96 | Algae or other aquatic plants | 0.21mg/L | 4 |
| octylphenol, ethoxylated | NOEC | 168 | Fish | 0.004mg/L | 4 |
| chlorothalonil | LC50 | 96 | Fish | 0.0076mg/L | 4 |
| chlorothalonil | EC50 | 48 | Crustacea | 0.0066475mg/L | 4 |
| chlorothalonil | EC50 | 72 | Algae or other aquatic plants | 0.0068mg/L | 4 |
| chlorothalonil | BCF | 336 | Algae or other aquatic plants | 0.02mg/L | 4 |
| chlorothalonil | EC10 | 48 | Crustacea | 0.00055839mg/L | 4 |
| chlorothalonil | NOEC | 240 | Crustacea | 0.0003mg/L | 4 |
| calcium carbonate | LC50 | 96 | Fish | >56000mg/L | 4 |
| calcium carbonate | EC50 | 72 | Algae or other aquatic plants | >14mg/L | 2 |
| calcium carbonate | NOEC | 72 | Algae or other aquatic plants | 14mg/L | 2 |
| zinc oxide | LC50 | 96 | Fish | 0.439mg/L | 2 |
| zinc oxide | EC50 | 48 | Crustacea | 0.105mg/L | 2 |
| zinc oxide | EC50 | 72 | Algae or other aquatic plants | 0.042mg/L | 4 |
| zinc oxide | BCF | 336 | Fish | 4376.673mg/L | 4 |
| zinc oxide | EC20 | 72 | Algae or other aquatic plants | 0.023mg/L | 4 |

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| zinc oxide | NOEC | 72 | Algae or other aquatic plants | 0.0049mg/L | 2 |
|--------------------------------|---------------------|----------------|--|---------------|---|
| propylene glycol | LC50 | 96 | Fish | 710mg/L | 4 |
| propylene glycol | EC50 | 48 | Crustacea | >1000mg/L | 4 |
| propylene glycol | EC50 | 96 | Algae or other aquatic plants | 10905.921mg/L | 3 |
| propylene glycol | EC50 | 384 | Crustacea | 311.145mg/L | 3 |
| propylene glycol | NOEC | 168 | Fish | 98mg/L | 4 |
| silica amorphous | LC50 | 96 | Fish | 120.743mg/L | 3 |
| silica amorphous | EC50 | 48 | Crustacea | ca.7600mg/L | 1 |
| silica amorphous | EC50 | 72 | Algae or other aquatic plants | 440mg/L | 1 |
| silica amorphous | EC50 | 384 | Crustacea | 28.000mg/L | 3 |
| silica amorphous | NOEC | 72 | Algae or other aquatic plants | 60mg/L | 1 |
| ammonia anhydrous liquefied | LC50 | 96 | Fish | 0.068mg/L | 2 |
| ammonia anhydrous liquefied | EC50 | 48 | Crustacea | 0.179mg/L | 5 |
| ammonia anhydrous liquefied | EC50 | 96 | Algae or other aquatic plants | 311.661mg/L | 3 |
| ammonia anhydrous liquefied | EC50 | 1440 | Crustacea | 0.016mg/L | 5 |
| ammonia anhydrous liquefied | NOEC | Not Applicable | Fish | 0.0015mg/L | 5 |
| xylene | LC50 | 96 | Fish | 2.6mg/L | 2 |
| kylene | EC50 | 48 | Crustacea | >3.4mg/L | 2 |
| kylene | EC50 | 72 | Algae or other aquatic plants | 4.6mg/L | 2 |
| kylene | EC50 | 24 | Crustacea | 0.711mg/L | 4 |
| kylene | NOEC | 73 | Algae or other aquatic plants | 0.44mg/L | 2 |
| ethylbenzene | LC50 | 96 | Fish | 0.0043mg/L | 4 |
| ethylbenzene | EC50 | 48 | Crustacea | 1.184mg/L | 4 |
| ethylbenzene | EC50 | 96 | Algae or other aquatic plants | 3.6mg/L | 2 |
| ethylbenzene | EC50 | 96 | Crustacea | =0.49mg/L | 1 |
| ethylbenzene | NOEC | 168 | Crustacea | 0.96mg/L | 5 |
| Legend: | Aquatic Toxicity Da | | ECHA Registered Substances - Ecotoxicologic ox database - Aquatic Toxicity Data 5. ECETOC ntration 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 Aromatic Substances Series:

For Xylenes:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m3 /mol : 637-879; Henry's atm m3 /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.

Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------------------------------|-----------------------------|-----------------------------|
| titanium dioxide (anatase) | HIGH | HIGH |
| azadioxabicyclooctane, isomer 1 | HIGH | HIGH |
| n-butyl methacrylate | LOW | LOW |
| chlorothalonil | HIGH | HIGH |
| propylene glycol | LOW | LOW |
| silica amorphous | LOW | LOW |
| ammonia anhydrous liquefied | LOW | LOW |
| xylene | HIGH (Half-life = 360 days) | LOW (Half-life = 1.83 days) |
| ethylbenzene | HIGH (Half-life = 228 days) | LOW (Half-life = 3.57 days) |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------------------------------|------------------------|
| titanium dioxide (anatase) | LOW (BCF = 10) |
| azadioxabicyclooctane, isomer 1 | LOW (LogKOW = -1.5532) |

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| n-butyl methacrylate | LOW (BCF = 114) |
|-----------------------------|-----------------------|
| octylphenol, ethoxylated | LOW (BCF = 30) |
| chlorothalonil | LOW (BCF = 125) |
| zinc oxide | LOW (BCF = 217) |
| propylene glycol | LOW (BCF = 1) |
| silica amorphous | LOW (LogKOW = 0.5294) |
| ammonia anhydrous liquefied | LOW (LogKOW = 0.229) |
| xylene | MEDIUM (BCF = 740) |
| ethylbenzene | LOW (BCF = 79.43) |

Mobility in soil

| Ingredient | Mobility |
|------------------------------------|-------------------|
| titanium dioxide (anatase) | LOW (KOC = 23.74) |
| azadioxabicyclooctane, isomer 1 | LOW (KOC = 10) |
| n-butyl methacrylate | LOW (KOC = 63.6) |
| chlorothalonil | LOW (KOC = 2392) |
| propylene glycol | HIGH (KOC = 1) |
| silica amorphous | LOW (KOC = 23.74) |
| ammonia anhydrous liquefied | LOW (KOC = 14.3) |
| ethylbenzene | LOW (KOC = 517.8) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

| | 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. DO NOT allow wash water from cleaning or process equipment to enter drains. |
|---------------------|--|
| | It may be necessary to collect all wash water for treatment before disposal. |
| Product / Packaging | In all cases disposal to sever may be subject to local laws and regulations and these should be considered first. |
| disposal | ► Recycle wherever possible. |
| | 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. |
| | Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material). |

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant



Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

TITANIUM DIOXIDE (ANATASE)(1317-70-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs | US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants |
|---|--|
| US - Alaska Limits for Air Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant |
| US - California Permissible Exposure Limits for Chemical Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants |
| US - California Proposition 65 - Carcinogens | US - Washington Permissible exposure limits of air contaminants |
| US - Hawaii Air Contaminant Limits | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| US - Idaho - Limits for Air Contaminants | US ACGIH Threshold Limit Values (TLV) |
| US - Massachusetts - Right To Know Listed Chemicals | US ACGIH Threshold Limit Values (TLV) - Carcinogens |
| US - Michigan Exposure Limits for Air Contaminants | US NIOSH Recommended Exposure Limits (RELs) |
| US - Minnesota Permissible Exposure Limits (PELs) | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| US - Oregon Permissible Exposure Limits (Z-1) | US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Ris |
| US - Pennsylvania - Hazardous Substance List | Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for |
| US - Rhode Island Hazardous Substance List | Chemicals Causing Reproductive Toxicity |
| | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| AZADIOXABICYCLOOCTANE, ISOMER 1(56709-13-8) IS FOUND ON THE FOLLOWING F | REGULATORY LISTS |
| US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory | |
| N-BUTYL METHACRYLATE(97-88-1) IS FOUND ON THE FOLLOWING REGULATORY L | ISTS |
| US - Massachusetts - Right To Know Listed Chemicals | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| US - Pennsylvania - Hazardous Substance List | |
| OCTYLPHENOL, ETHOXYLATED(9036-19-5) IS FOUND ON THE FOLLOWING REGULA | TORY LISTS |
| US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| Contaminants | |
| CHLOROTHALONIL(1897-45-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS | |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): |
| Monographs | Carcinogens |
| US - California - Proposition 65 - Priority List for the Development of MADLs for Chemicals | US - Pennsylvania - Hazardous Substance List |
| Causing Reproductive Toxicity | US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values |
| US - California Proposition 65 - Carcinogens | US EPCRA Section 313 Chemical List |
| US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| US - Massachusetts - Right To Know Listed Chemicals | |
| CALCIUM CARBONATE(471-34-1) IS FOUND ON THE FOLLOWING REGULATORY LIST | 29 |
| | |
| US - Alaska Limits for Air Contaminants | US - Rhode Island Hazardous Substance List |
| US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits | US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminan |
| | |
| US - Idaho - Limits for Air Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants |
| US - Massachusetts - Right To Know Listed Chemicals | US - Washington Permissible exposure limits of air contaminants |
| US - Michigan Exposure Limits for Air Contaminants | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| US - Minnesota Permissible Exposure Limits (PELs) | US NIOSH Recommended Exposure Limits (RELs) |
| US - Oregon Permissible Exposure Limits (Z-1) | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| US - Pennsylvania - Hazardous Substance List | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| ZINC OXIDE(1314-13-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS | |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| Monographs | Contaminants |
| US - Alaska Limits for Air Contaminants | US - Washington Permissible exposure limits of air contaminants |
| US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| (CRELs) | US ACGIH Threshold Limit Values (TLV) |
| US - California Permissible Exposure Limits for Chemical Contaminants | US CWA (Clean Water Act) - Priority Pollutants |
| US - Hawaii Air Contaminant Limits | US CWA (Clean Water Act) - Toxic Pollutants |
| US - Idaho - Limits for Air Contaminants | US EPA Carcinogens Listing |
| US - Massachusetts - Right To Know Listed Chemicals | US EPCRA Section 313 Chemical List |
| US - Michigan Exposure Limits for Air Contaminants | US National Toxicology Program (NTP) 14th Report Part B. Reasonably Anticipated to be a |
| US - Minnesota Permissible Exposure Limits (PELs) | Human Carcinogen |
| US - Oregon Permissible Exposure Limits (Z-1) | US NIOSH Recommended Exposure Limits (RELs) |
| US - Pennsylvania - Hazardous Substance List | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| US - Rhode Island Hazardous Substance List | US OSHA Permissible Exposure Levels (PELs) - Table Z3 |
| US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| | |

NON-HAZARDOUS INGREDIENT (NOT AVAIL.) IS FOUND ON THE FOLLOWING REGULATORY LISTS Not Applicable

PROPYLENE GLYCOL(57-55-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Pennsylvania - Hazardous Substance List

US - Rhode Island Hazardous Substance List

US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US AIHA Workplace Environmental Exposure Levels (WEELs) US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)

US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

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

SILICA AMORPHOUS(7631-86-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

| nternational Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - Rhode Island Hazardous Substance List |
|--|--|
| Monographs | US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants |
| US - Alaska Limits for Air Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants |
| US - California Permissible Exposure Limits for Chemical Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| JS - Hawaii Air Contaminant Limits | Contaminants |
| JS - Idaho - Limits for Air Contaminants | US - Washington Permissible exposure limits of air contaminants |
| JS - Idaho - Toxic and Hazardous Substances - Mineral Dust | US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values |
| IS - Massachusetts - Right To Know Listed Chemicals | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| IS - Michigan Exposure Limits for Air Contaminants | US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts |
| IS - Minnesota Permissible Exposure Limits (PELs) | US NIOSH Recommended Exposure Limits (RELs) |
| IS - Oregon Permissible Exposure Limits (Z-1) | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| S - Oregon Permissible Exposure Limits (Z-3) | US OSHA Permissible Exposure Levels (PELs) - Table Z3 |
| IS - Pennsylvania - Hazardous Substance List | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| MMONIA ANHYDROUS LIQUEFIED(7664-41-7) IS FOUND ON THE FOLLOWING REGU | LATORY LISTS |
| ternational Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant |
| assenger and Cargo Aircraft | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| S - Alaska Limits for Air Contaminants | Contaminants |
| S - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) | US - Washington Permissible exposure limits of air contaminants |
| S - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs | US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values |
| CRELS) | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| S - California Permissible Exposure Limits for Chemical Contaminants | US ACGIH Threshold Limit Values (TLV) |
| S - Hawaii Air Contaminant Limits | US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) |
| S - Idaho - Limits for Air Contaminants | US CWA (Clean Water Act) - List of Hazardous Substances |
| S - Massachusetts - Right To Know Listed Chemicals | US EPCRA Section 313 Chemical List |
| S - Michigan Exposure Limits for Air Contaminants | US NIOSH Recommended Exposure Limits (RELs) |
| S - Minnesota Permissible Exposure Limits (PELs) | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| S - Oregon Permissible Exposure Limits (Z-1) | US SARA Section 302 Extremely Hazardous Substances |
| S - Pennsylvania - Hazardous Substance List | US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants |
| S - Rhode Island Hazardous Substance List | |
| S - Tennessee Occupational Exposure Limits - Limits For Air Contaminants | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| | |
| (YLENE(1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS | |
| nternational Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant |
| lonographs | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| S - Alaska Limits for Air Contaminants | Contaminants |
| S - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) | US - Washington Permissible exposure limits of air contaminants |
| S - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs | US ACGIH Threshold Limit Values (TLV) |
| CRELs) | US ACGIH Threshold Limit Values (TLV) - Carcinogens |
| IS - California Permissible Exposure Limits for Chemical Contaminants | US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) |
| JS - Hawaii Air Contaminant Limits | US Clean Air Act - Hazardous Air Pollutants |
| S - Idaho - Limits for Air Contaminants | US CWA (Clean Water Act) - List of Hazardous Substances |
| IS - Massachusetts - Right To Know Listed Chemicals | US EPA Carcinogens Listing |
| S - Michigan Exposure Limits for Air Contaminants | US EPCRA Section 313 Chemical List |
| S - Minnesota Permissible Exposure Limits (PELs) | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| S - Oregon Permissible Exposure Limits (Z-1) | US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants |
| S - Pennsylvania - Hazardous Substance List | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| JS - Rhode Island Hazardous Substance List | |
| IS - Tennessee Occupational Exposure Limits - Limits For Air Contaminants | |
| THYLBENZENE(100-41-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS | |
| nternational Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| Ionographs | Contaminants |
| S - Alaska Limits for Air Contaminants | US - Washington Permissible exposure limits of air contaminants |
| S - California - Proposition 65 - Priority List for the Development of MADLs for Chemicals | US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values |
| ausing Reproductive Toxicity | US - Washington Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| S - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs | US ACGIH Threshold Limit Values (TLV) |
| CRELS) | US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens |
| S - California Permissible Exposure Limits for Chemical Contaminants | |
| S - California Proposition 65 - Carcinogens | US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) |
| S - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens | US Clean Air Act - Hazardous Air Pollutants |
| S - Hawaii Air Contaminant Limits | US CWA (Clean Water Act) - List of Hazardous Substances |
| S - Idaho - Limits for Air Contaminants | US CWA (Clean Water Act) - Priority Pollutants |
| | US CWA (Clean Water Act) - Toxic Pollutants |
| S - Massachusetts - Right To Know Listed Chemicals | US EPA Carcinogens Listing |
| S - Michigan Exposure Limits for Air Contaminants | US EPCRA Section 313 Chemical List |
| S - Minnesota Permissible Exposure Limits (PELs) | US NIOSH Recommended Exposure Limits (RELs) |
| S - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| arcinogens | US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants |
| JS - Oregon Permissible Exposure Limits (Z-1) | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| JS - Pennsylvania - Hazardous Substance List | |
| JS - Rhode Island Hazardous Substance List | |
| | |

- US Tennessee Occupational Exposure Limits Limits For Air Contaminants
- US Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Issue Date: 02/07/2017 Print Date: 02/07/2017

Novus Acrylic DTM Primer & Finish (F)-White F10600

| Immediate (acute) health hazard | No |
|---------------------------------|----|
| Delayed (chronic) health hazard | No |
| Fire hazard | No |
| Pressure hazard | No |
| Reactivity hazard | No |

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

| Name | Reportable Quantity in Pounds (lb) | Reportable Quantity in kg |
|----------------|------------------------------------|---------------------------|
| Ammonia | 100 | 45.4 |
| Xylene (mixed) | 100 | 45.4 |
| Ethylbenzene | 1000 | 454 |

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PREPOSITION 65 - CARCINOGENS & REPRODUCTIVE TOXICITY (CRT): LISTED SUBSTANCE

Titanium dioxide (airborne, unbound particles of respirable size), Chlorothalonil, Ethylbenzene Listed

| National Inventory | Status | |
|----------------------------------|--|--|
| Australia - AICS | Y | |
| Canada - DSL | Υ | |
| Canada - NDSL | N (chlorothalonil; xylene; propylene glycol; ethylbenzene; octylphenol, ethoxylated; n-butyl methacrylate; ammonia anhydrous liquefied; azadioxabicyclooctane, isomer 1) | |
| China - IECSC | Υ | |
| Europe - EINEC / ELINCS / NLP | N (octylphenol, ethoxylated) | |
| Japan - ENCS | N (octylphenol, ethoxylated; azadioxabicyclooctane, isomer 1) | |
| Korea - KECI | Υ | |
| New Zealand - NZIoC | Y | |
| Philippines - PICCS | Y | |
| USA - TSCA | Y | |
| Legend: | Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) | |

SECTION 16 OTHER INFORMATION

CONTACT POINT

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

Other information

Ingredients with multiple cas numbers

| Name | CAS No |
|------------------------------------|--|
| titanium dioxide (anatase) | 1317-70-0, 13463-67-7 |
| azadioxabicyclooctane, isomer 1 | 56709-13-8, 107497-96-1, 59720-42-2, 6542-37-6 |
| calcium carbonate | 471-34-1, 13397-26-7, 15634-14-7, 1317-65-3, 72608-12-9, 878759-26-3, 63660-97-9, 459411-10-0, 198352-33-9, 146358-95-4 |
| zinc oxide | 1314-13-2, 175449-32-8 |
| silica amorphous | 7631-86-9, 112945-52-5, 67762-90-7, 68611-44-9, 68909-20-6, 112926-00-8, 61790-53-2, 60676-86-0, 91053-39-3, 69012-64-2, 844491-94-7 |

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

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

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