

Polyaspartic Pigment Pack Legendary Gray 720 **ICP Building Solutions Group**

Version No: 1.1 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements Issue Date: 10/28/2021 Print Date: 10/28/2021 S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

1 route identifier	
Product name Polyaspartic Pigment Pack Legendary Gray 720	
Synonyms Not Available Proper shipping name Resin Solution, flammable	

Recommended use of the chemical and restrictions on use

Relevant identified uses	Colo

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

Registered company name	ICP Building Solutions Group	
Address	4565 W Watkins Street Phoenix AZ 85043 United States	
Telephone	23-435-2277	
Fax	Not Available	
Website	www.icpgroup.com	
Email	sds@icpgroup.com	

Emergency phone number

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

SECTION 2 Hazard(s) identification

Classification of the substance or mixture





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

Classification

Flammable Liquids Category 3, Serious Eye Damage/Eye Irritation Category 2A, Sensitisation (Skin) Category 1, Carcinogenicity Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 3

Label elements

Hazard pictogram(s)







Signal word

Warning

Hazard statement(s)

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.

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H317	May cause an allergic skin reaction.	
H351	Suspected of causing cancer.	
H412	Harmful to aquatic life with long lasting effects.	

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

1 Todationary Statement(s) 1 To Tollion		
P202 Do not handle until all safety precautions have been read and understood.		
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P233	Keep container tightly closed.	
P240	Ground/bond container and receiving equipment	
P241	Use explosion-proof (electrical/ventilating/lighting) equipment	
P242	Use only non-sparking tools	
P243	Take precautionary measures against static discharge.	
P261	Avoid breathing dust/fumes/gas/mist/vapors/spray	
P264	Wash thoroughly after handling	
P 272	Contaminated work clothing should not be allowed out of the workplace.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	

Precautionary statement(s) Response

· · · · · · · · · · · · · · · · · · ·	
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.	
P308+P313 IF exposed or concerned: Get medical advice/ attention.	
P370+P378 In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.	
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.	
P337+P313 IF Eye irritation persists: Get medical advice/attention.	
P363 Wash contaminated clothing before reuse.	

Precautionary statement(s) Storage

1 robustionary diatomorn(o) otorago	
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.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1333-86-4	1-5	carbon black
136210-30-5	10-30	aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester
145899-78-1	1-5	3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)
108-65-6	1-5	propylene glycol monomethyl ether acetate, alpha-isomer
21645-51-2	1-5	aluminium hydroxide
13463-67-7*	15-40	Titanium Dioxide Ti02

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

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- 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.

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	 Seek medical attention without delay; if pain persists or recurs 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	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

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

BASIC TREATMENT

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

ADVANCED TREATMENT

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

EMERGENCY DEPARTMENT

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

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

SECTION 5 Fire-fighting measures

Extinguishing media

- Alcohol stable 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

Special protective equipment a	and precautions for fire-righters
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive.
Fire/Explosion Hazard	► Liquid and vapour are flammable. ► Moderate fire hazard when exposed to heat or flame. Combustion products include: carbon dioxide (CO2) carbon monoxide (CO) nitrogen oxides (NOx) other pyrolysis products typical of burning organic material.

SECTION 6 Accidental release measures

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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	Remove all ignition sources. Clean up all spills immediately.
Major Spills	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	 Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure occurs. DO NOT allow clothing wet with material to stay in contact with skin
Other information	 Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container	 Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.
Storage incompatibility	 Esters react with acids to liberate heat along with alcohols and acids. Strong oxidising acids may cause a vigorous reaction with esters that is sufficiently exothermic to ignite the reaction products. Segregate from alcohol, water.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-3	carbon black	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	carbon black	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Ca; TWA 0.1 mg PAHs/m3 [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)] See Appendix A See Appendix C
US ACGIH Threshold Limit Values (TLV)	carbon black	Carbon black (Inhalable particulate matter)	3 mg/m3	Not Available	Not Available	A3
US OSHA Permissible Exposure Limits (PELs) Table Z-3	aluminium hydroxide	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	aluminium hydroxide	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	aluminium hydroxide	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	aluminium hydroxide	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	aluminium hydroxide	Particulates not otherwise regulated	Not Available	Not Available	Not Available	See Appendix D
US ACGIH Threshold Limit Values (TLV)	aluminium hydroxide	Aluminum metal and insoluble compounds (Respirable particulate matter)	1 mg/m3	Not Available	Not Available	A4
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Titanium Dioxide Ti02	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Titanium Dioxide Ti02	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Titanium Dioxide Ti02	Titanium dioxide - Total dust	15 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Titanium Dioxide Ti02	Titanium dioxide	Not Available	Not Available	Not Available	Ca; See Appendix A
US ACGIH Threshold Limit Values (TLV)	Titanium Dioxide Ti02	Titanium dioxide	10 mg/m3	Not Available	Not Available	(A4)

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
carbon black	9 mg/m3	99 mg/m3	590 mg/m3
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available	Not Available
aluminium hydroxide	8.7 mg/m3	73 mg/m3	440 mg/m3
Titanium Dioxide Ti02	30 mg/m3	330 mg/m3	2,000 mg/m3

Ingredient	Original IDLH	Revised IDLH
carbon black	1,750 mg/m3	Not Available
aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester	Not Available	Not Available
3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)	Not Available	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available
aluminium hydroxide	Not Available	Not Available
Titanium Dioxide Ti02	5,000 mg/m3	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester	D	> 0.1 to ≤ 1 ppm
3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)	D	> 0.1 to ≤ 1 ppm
Notes:	Occupational exposure banding is a process of assigning chemicals and the adverse health outcomes associated with exposure. The ou which corresponds to a range of exposure concentrations that are e.	tput of this process is an occupational exposure band (OEB),

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

- Safety glasses with side shields.
- Chemical goggles.

Skin protection

See Hand protection below

- ▶ Wear chemical protective gloves, e.g. PVC.
- ▶ Wear safety footwear or safety gumboots, e.g. Rubber

NOTE: F The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective

Hands/feet protection

equipment, to avoid all possible skin contact. For esters:

▶ Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials. 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.

Body protection

See Other protection below

Figure 1. Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or

Other protection

- Figure 1 Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges.
- Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable

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- Overalls
- PVC Apron.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).

Respiratory protection

Type A 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)	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)	50	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Flammable.	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
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.
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.

The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.

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Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still prod 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. 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	luce health damage
prior to the use of the material and ensure that any external damage is suitably protected.	effects. Examine the skin
Eye This material can cause eye irritation and damage in some persons.	
Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochem Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general There is sufficient evidence to suggest that this material directly causes cancer in humans.	,

Polyaspartic Pigment Pack Legendary Gray	TOXICITY	IRRITATION
720	Not Available	Not Available
	TOXICITY	IRRITATION
carbon black	Dermal (rabbit) LD50: >3000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >8000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) $[1]$
	TOXICITY	IRRITATION
aspartic acid,	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye : Mild
,N'-(methylenedicyclohexanediyl)bis-,ester	Inhalation(Rat) LC50; >4.224 mg/L4h ^[1]	Skin : Moderate
	Oral(Rat) LD50; >2000 mg/kg ^[1]	
	TOXICITY	IRRITATION
3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)	dermal (rat) LD50: >2000 mg/kg ^[2]	Not Available
Carbonate (2.1)	Oral(Rat) LD50; >2000 mg/kg ^[2]	
	TOXICITY	IRRITATION
ropylene glycol monomethyl ether acetate, alpha-isomer	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
aipiia-isoniei	Oral(Rat) LD50; 3739 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
	TOXICITY	IRRITATION
aluminium hydroxide	Inhalation(Rat) LC50; >2.3 mg/l4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >2000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) $[1]$
	TOXICITY	IRRITATION
	dermal (hamster) LD50: >=10000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
Titanium Dioxide Ti02	Inhalation(Rat) LC50; >2.28 mg/l4h ^[1]	Skin: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >=2000 mg/kg ^[1]	

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

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Generally, linear and branched-chain alkyl esters are hydrolysed to their component alcohols and carboxylic acids in the intestinal tract, blood and most tissues throughout the body. Following hydrolysis the component alcohols and carboxylic acids are metabolized

Oral acute toxicity studies have been reported for 51 of the 67 esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids

CARBON BLACK

Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil reported

WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

ASPARTIC ACID. N,N'-(METHYLENEDICYCLOHEXANEDIYL)BIS-,ESTER

for similar substance CAS 136210-10-32-7: Evidence of sensitisation (adjuvant test) * After the first challenge very mild to clearly visible skin reddening was observed in 85% of the test substance animals. After the second challenge, very mild to clearly visible skin reddening was observed in 50% and 35% of the test substance animals challenged with 25% and 12% test substance respectively. Rat repeat dose oral toxicity - 29 days NOAEL 1000 mg/kg/day * Genotoxicity ? bacterial reverse mutation non mutagenic * Genotoxicity ? in vitro not determined * Genotoxicity ? in vivo erythrocyte micronucleus test non clastogenic * The notified chemical is considered to be of low acute toxicity via the oral, dermal and inhalation routes. Irritation and Sensitisation. The material is considered to be a slight skin and eye irritant and mild respiratory irritant and a skin sensitiser. As skin reactions were observed in 85% of animals at a concentration of 50%, the substance is considered to be a strong sensitiser. Repeated Dose Toxicity. In a 28 day study in rats, the No Observed Adverse Effect Level (NOAEL) was established as 1000 mg/kg bw/day based on the absence of adverse treatment related effects. Mutagenicity. The material was negative in an Ames test and an in vivo erythrocyte micronucleus test. The substance is not considered to be mutagenic. Neurotoxicity: In the in vivo mouse erythrocyte micronucleus test, following intraperitoneal administration of a fairly high dose (5345 mg/kg bw) some evidence of non-specific neurological impairment was seen. However, this was not observed in any of the tests conducted on any other species and could either be species-specific or an expression of generalised toxicity induced at high doses, as

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opposed to specific neurotoxicity. * NICNAS Report Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure. 3-OXAZOLIDINEETHANOL, 2-(1-METHYLETHYL)-, * Industrial Copolymers Limited SDS (incozol LV) CARBONATE (2:1) A BASF report (in ECETOC) showed that inhalation exposure to 545 ppm PGMEA (beta isomer) was associated with a teratogenic response in rabbits; but exposure to 145 ppm and 36 ppm had no adverse effects. The beta isomer of PGMEA comprises only 10% of the commercial material, the remaining 90% is alpha isomer. Hazard appears low but emphasizes the need for care in handling this chemical. *Shin-Etsu SDS For propylene glycol ethers (PGEs): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA) and tripropylene glycol methyl ether (TPM). PROPYLENE GLYCOL MONOMETHYL ETHER Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than ACETATE, ALPHA-ISOMER some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on the reproductive organs, the developing embryo and foetus, blood or thymus gland, are not seen with the commercial-grade propylene glycol ethers. Animal testing shows that high concentrations (for example, 0.5%) are associated with birth defects but lower exposures have not been shown to cause adverse effects. The beta isomer of PGMEA comprises only 10% of the commercial material; the remaining 90% is alpha isomer. Hazard appears low, but emphasizes the need for care in handling this chemical. Polyaspartic Pigment Pack Legendary Gray 720 & ASPARTIC ACID. The following information refers to contact allergens as a group and may not be specific to this product. N.N'-(METHYLENEDICYCLOHEXANEDIYL)BIS-.ESTER Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The & 3-OXAZOLIDINEETHANOL, 2-(1-METHYLETHYL)-, pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. CARBONATE (2:1) CARBON BLACK & ALUMINIUM HYDROXIDE No significant acute toxicological data identified in literature search. **Acute Toxicity** Carcinogenicity Skin Irritation/Corrosion Reproductivity × Serious Eye Damage/Irritation STOT - Single Exposure Respiratory or Skin × STOT - Repeated Exposure sensitisation

Legend:

Aspiration Hazard

X - Data either not available or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Mutagenicity

Toxicity

	Endpoint	Test Duration (hr)		Species		Value	Source
Polyaspartic Pigment Pack Legendary Gray 720	Not Available	Not Available		Not Available		Not Available	Not Available
	Endpoint	Test Duration (hr)	Spe	ecies	Value)	Source
	EC50	72h	Alg	ae or other aquatic plants	>0.2r	ng/l	2
carbon black	LC50	96h	Fisl	ı	>100	mg/l	2
	EC50	48h	Cru	stacea	33.07	'6-41.968mg/l	4
	NOEC(ECx)	24h	Cru	stacea	3200	mg/l	1
	Endpoint	Test Duration (hr)		Species		Value	Source
	EC50	72h		Algae or other aquatic plants		34mg/l	2
aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester	LC50	96h		Fish		66mg/l	2
N,N -(metriyleriedicyclonexaliediyi)bis-,ester	EC50	48h		Crustacea		88.6mg/l	2
	NOEC(ECx)	504h		Crustacea		0.013mg/l	2
	Endpoint	Test Duration (hr)	:	Species		Value	Source
3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)	Not Available	Not Available		Not Available		Not Available	Not Available
	Endpoint	Test Duration (hr)		Species		Value	Source
	EC50	72h		Algae or other aquatic plants		>1000mg/l	2
propylene glycol monomethyl ether acetate,	LC50	96h		Fish		>100mg/l	2
alpha-isomer	EC50	48h		Crustacea		373mg/l	2
	NOEC(ECx)	336h		Fish		47.5mg/l	2
	EC50	96h		Algae or other aquatic plants		>1000mg/l	2

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179.05mg/l

	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	72h	Algae or other aquatic plants	>100mg/l	1
aluminium hydroxide	LC50	96h	Fish	0.57mg/l	2
	EC50	48h	Crustacea	>0.065mg/l	4
	EC50	96h	Algae or other aquatic plants	0.46mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
		` '	Фресіос	value	Source
	EC50	72h	Algae or other aquatic plants	3.75-7.58mg/l	4
	•	72h 1008h	•		
Titanium Dioxide Ti02	EC50		Algae or other aquatic plants	3.75-7.58mg/l	4
Titanium Dioxide Ti02	EC50 BCF	1008h	Algae or other aquatic plants Fish	3.75-7.58mg/l <1.1-9.6	7
Titanium Dioxide Ti02	EC50 BCF EC50	1008h 48h	Algae or other aquatic plants Fish Crustacea	3.75-7.58mg/l <1.1-9.6 1.9mg/l	4 7 2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Algae or other aquatic plants

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

EC50

96h

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.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
propylene glycol monomethyl ether acetate, alpha-isomer	LOW	LOW
Titanium Dioxide Ti02	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
propylene glycol monomethyl ether acetate, alpha-isomer	LOW (LogKOW = 0.56)
Titanium Dioxide Ti02	LOW (BCF = 10)

Mobility in soil

mobility in con	
Ingredient	Mobility
propylene glycol monomethyl ether acetate, alpha-isomer	HIGH (KOC = 1.838)
Titanium Dioxide Ti02	LOW (KOC = 23.74)

SECTION 13 Disposal considerations

Waste treatment methods

- ▶ Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their

Product / Packaging disposal

- ▶ 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.
- ► 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.

SECTION 14 Transport information

Labels Required



Marine Pollutant

NO

Land transport (DOT)

UN number	1866
UN proper shipping name	Resin Solution, flammable

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Class 3 Transport hazard class(es) Subrisk Not Applicable Packing group **Environmental hazard** Not Applicable Hazard Label 3 Special precautions for user B1, B52, IB3, T2, TP1 Special provisions

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

Sea transport (IMDG-Code / GGVSee)

UN number	1866		
UN proper shipping name	RESIN SOLUTION fla	ammable	
Transport hazard class(es)	IMDG Class 3	Not Applicable	
Packing group	III		
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number Special provisions Limited Quantities	F-E , S-E 223 955 5 L	

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

Not Applicable

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

Product name	Group
carbon black	Not Available
aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester	Not Available
3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available
aluminium hydroxide	Not Available
Titanium Dioxide Ti02	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
carbon black	Not Available
aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester	Not Available
3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1)	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available
aluminium hydroxide	Not Available
Titanium Dioxide Ti02	Not Available

SECTION 15 Regulatory information

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

carbon black is found on the following regulatory lists Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - California Proposition 65 - Carcinogens

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

US - Massachusetts - Right To Know Listed Chemicals

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1) is found on the following regulatory lists

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

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

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants

US AIHA Workplace Environmental Exposure Levels (WEELs)

US Clean Air Act - Hazardous Air Pollutants

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPCRA Section 313 Chemical List

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

US Toxicology Excellence for Risk Assessment (TERA) Workplace Environmental Exposure Levels (WEEL)

US TSCA Chemical Substance Inventory - Interim List of Active Substances

aluminium hydroxide is found on the following regulatory lists

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Titanium Dioxide Ti02 is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

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

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

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - California Proposition 65 - Carcinogens

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

US - Massachusetts - Right To Know Listed Chemicals

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes

US DOE Temporary Emergency Exposure Limits (TEELs)

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

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

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

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

None Reported

State Regulations

US. California Proposition 65

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WARNING: This product can expose you to chemicals including carbon black, Titanium Dioxide Ti02, which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

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National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	No (3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
Canada - DSL	No (3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
Canada - NDSL	No (carbon black; aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester; propylene glycol monomethyl ether acetate, alpha-isomer; aluminium hydroxide; Titanium Dioxide Ti02)
China - IECSC	No (3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
Europe - EINEC / ELINCS / NLP	No (aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester; 3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
Japan - ENCS	No (aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester; 3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester; 3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (aspartic acid, N,N'-(methylenedicyclohexanediyl)bis-,ester; 3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
Vietnam - NCI	Yes
Russia - FBEPH	No (3-oxazolidineethanol, 2-(1-methylethyl)-, carbonate (2:1))
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	10/28/2021
Initial Date	04/29/2021

CONTACT POINT

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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^{**}PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES**