



Poly 100 "A" Sand

ICP Construction Inc.

Version No: 3.4
Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: **03/31/2023**
Print Date: **03/31/2023**
S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

Product name	Poly 100 "A" Sand
Synonyms	Not Available
Proper shipping name	Resin Solution, flammable
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Specialty Flooring Resin
--------------------------	--------------------------

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

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

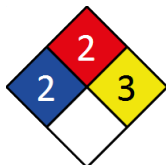
Emergency phone number

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

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

NFPA 704 diamond



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

Classification	Flammable Liquids Category 3, Carcinogenicity Category 1A, Reproductive Toxicity Category 1B, Sensitisation (Skin) Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 3
----------------	---

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

H226	Flammable liquid and vapour.
------	------------------------------

Poly 100 "A" Sand

H350	May cause cancer.
H360	May damage fertility or the unborn child.
H317	May cause an allergic skin reaction.
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.
P103	Read label before use.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves and protective clothing.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.
P202	Do not handle until all safety precautions have been read and understood.
P272	Contaminated work clothing must not be allowed out of the workplace.

Precautionary statement(s) Response

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.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Precautionary statement(s) Storage

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

Precautionary statement(s) Disposal

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

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

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
108-65-6	15-40	<u>propylene glycol monomethyl ether acetate, alpha-isomer</u>
100-41-4	0.1-1	<u>ethylbenzene</u>
141-78-6	0.1-1	<u>ethyl acetate</u>
70657-70-4	0.1-1	<u>propylene glycol monomethyl ether acetate, beta-isomer</u>
763-69-9	1-5	<u>ethyl-3-ethoxypropionate</u>
82919-37-7	0.1-1	<u>methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate</u>
41556-26-7	0.1-1	<u>bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate</u>
104810-47-1	0.1-1	<u>di-CG 20-568 ethoxylated</u>

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**

Continued...

Poly 100 "A" Sand

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ 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. ▶ 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	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay.
Ingestion	<ul style="list-style-type: none"> ▶ 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 electrocardiograph.
- ▶ Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- ▶ Consult a toxicologist as necessary.

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

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 and precautions for fire-fighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Liquid and vapour are flammable. ▶ Moderate fire hazard when exposed to heat or flame. <p>Combustion products include:</p>

Continued...

Poly 100 "A" Sand

carbon monoxide (CO)
carbon dioxide (CO₂)
other pyrolysis products typical of burning organic material.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"> ▶ Remove all ignition sources. ▶ Clean up all spills immediately.
Major Spills	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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. <p>The tendency of many ethers to form explosive peroxides is well documented. Ethers lacking non-methyl hydrogen atoms adjacent to the ether link are thought to be relatively safe</p> <ul style="list-style-type: none"> ▶ DO NOT concentrate by evaporation, or evaporate extracts to dryness, as residues may contain explosive peroxides with DETONATION potential. <p>The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example.</p> <ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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. ▶ Glycol ethers may form peroxides under certain conditions; the potential for peroxide formation is enhanced when these substances are used in processes such as distillation where they are concentrated or even evaporated to near-dryness or dryness; storage under a nitrogen atmosphere is recommended to minimise the possible formation of highly reactive peroxides ▶ Nitrogen blanketing is recommended if transported in containers at temperatures within 15 deg C of the flash-point and at or above the flash-point - large containers may first need to be purged and inerted with nitrogen prior to loading ▶ In the presence of strong bases or the salts of strong bases, at elevated temperatures, the potential exists for runaway reactions. ▶ Contact with aluminium should be avoided; release of hydrogen gas may result- glycol ethers will corrode scratched aluminium surfaces.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-1	ethylbenzene	Ethyl benzene	100 ppm / 435 mg/m ³	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	ethylbenzene	Ethyl benzene	100 ppm / 435 mg/m ³	545 mg/m ³ / 125 ppm	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	ethyl acetate	Ethyl acetate	400 ppm / 1400 mg/m ³	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	ethyl acetate	Ethyl acetate	400 ppm / 1400 mg/m ³	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
propylene glycol monomethyl	Not Available	Not Available	Not Available

Continued...

Poly 100 "A" Sand

Ingredient	TEEL-1	TEEL-2	TEEL-3
ether acetate, alpha-isomer			
ethylbenzene	Not Available	Not Available	Not Available
ethyl acetate	1,200 ppm	1,700 ppm	10000** ppm
propylene glycol monomethyl ether acetate, beta-isomer	Not Available	Not Available	Not Available
ethyl-3-ethoxypropionate	1.6 ppm	18 ppm	110 ppm

Ingredient	Original IDLH	Revised IDLH
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available
ethylbenzene	800 ppm	Not Available
ethyl acetate	2,000 ppm	Not Available
propylene glycol monomethyl ether acetate, beta-isomer	Not Available	Not Available
ethyl-3-ethoxypropionate	Not Available	Not Available
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Not Available	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	Not Available	Not Available
di-CG 20-568 ethoxylated	Not Available	Not Available


Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
propylene glycol monomethyl ether acetate, beta-isomer	E	≤ 0.1 ppm
ethyl-3-ethoxypropionate	E	≤ 0.1 ppm
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	D	> 0.1 to ≤ 1 ppm
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	D	> 0.1 to ≤ 1 ppm
di-CG 20-568 ethoxylated	D	> 0.1 to ≤ 1 ppm

Notes:

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

Exposure controls

Appropriate engineering controls	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.
Individual protection measures, such as personal protective equipment	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with side shields. ▶ Chemical goggles.
Skin protection	See Hand protection below
Hands/feet protection	<ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber <p>NOTE:</p> <ul style="list-style-type: none"> ▶ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. <p>For esters:</p> <ul style="list-style-type: none"> ▶ Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials. <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p>
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▶ Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent] ▶ 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 labels. ▶ Overalls. ▶ PVC Apron.

Continued...

Poly 100 "A" Sand

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

- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

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

Appearance	Not Available		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	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)	46	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 (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	197 when mixed as intended

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> ▶ 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	<p>The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.</p> <p>The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.</p> <p>The material has NOT been classified by EC Directives or other classification systems as "harmful by inhalation". This is because of the lack of corroborating animal or human evidence.</p>
----------------	--

Poly 100 "A" Sand

Ingestion	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. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There is sufficient evidence to suggest that this material directly causes cancer in humans. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Some glycol esters and their ethers cause wasting of the testicles, reproductive changes, infertility and changes to kidney function. Shorter chain compounds are more dangerous. Speculative discussions suspects that the absorption of UVB by the sunscreens chemical agents may enhance free radical formation, DNA damage and possible increase in melanoma formation as well as, decrease in Vitamin D production, which has been suggested to potentiate melanoma, breast and colonic cancer formation.

Poly 100 "A" Sand	TOXICITY	IRRITATION
	Not Available	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1] Oral (Rat) LD50: 3739 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]
ethylbenzene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 17800 mg/kg ^[2] Inhalation(Rat) LC50: 17.2 mg/4h ^[2] Oral (Rat) LD50: 3500 mg/kg ^[2]	Eye (rabbit): 500 mg - SEVERE Eye: no adverse effect observed (not irritating) ^[1] Skin (rabbit): 15 mg/24h mild Skin: no adverse effect observed (not irritating) ^[1]
ethyl acetate	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >18000 mg/kg ^[2] Inhalation(Mouse) LC50: >18 mg/4h ^[1] Oral (Mouse) LD50: 4100 mg/kg ^[2]	Eye (human): 400 ppm Eye: no adverse effect observed (not irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]
propylene glycol monomethyl ether acetate, beta-isomer	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >5000 mg/kg ^[2] Oral (Rat) LD50: 8532 mg/kg ^[2]	Not Available
ethyl-3-ethoxypropionate	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 4076 mg/kg ^[2] Inhalation(Rat) LC50: 1250 ppm4h ^[2] Oral (Rat) LD50: ~3200-5000 mg/kg ^[2]	Eye (rabbit): 500mg/24h - mild Skin (rabbit):10 mg/24h open mild
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	TOXICITY	IRRITATION
	Not Available	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	TOXICITY	IRRITATION
	Oral (Rat) LD50: 3100 mg/kg ^[2]	Not Available
di-CG 20-568 ethoxylated	TOXICITY	IRRITATION
	Not Available	Not Available
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	

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER	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
ETHYLBENZENE	Liver changes, uterual tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out

Poly 100 "A" Sand

	through urine. 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. WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, BETA-ISOMER	No data for material. Data for isomer only as its alpha isomer; propylene glycol monomethyl ether acetate: 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.
ETHYL-3-ETHOXYPROPIONATE	* Union Carbide ** Endura Manufacturing
DI-CG 20-568 ETHOXYLATED	Increase in absolute liver weight observed. No effect on microsomal protein content was noted, while a dose-dependent decrease in cytosolic protein content was observed. No clinical signs were observed at 10 mg/kg/day for F and at 10 and 50 mg/kg/day for M. Drooling was observed in M and F at 200 and 1000 mg/kg. Dam livers showed "moderate to striking peroxisome proliferation at all investigated periods of gestation." Peroxisomes were identified as "slightly increased" or "increased." No mitochondrial changes and a slight decrease in glycogen content on GD 21 were noted. Absolute liver weight was increased. For benzotriazoles There are several indications that the effects of phenolic benzotriazoles described in the literature might be caused by endocrine disruption, e.g. reduced concentrations of testosterone, higher concentrations of CYP 450, or higher activity of ethoxyresorufin-O-deethylase (EROD-activity). As in these cases there are also indications for toxic effects on the liver reported, the effects might actually be only secondary effects. Polyethers (such as ethoxylated surfactants and polyethylene glycols) are highly susceptible to being oxidized in the air. They then form complex mixtures of oxidation products. Animal testing reveals that whole the pure, non-oxidised surfactant is non-sensitizing, many of the oxidation products are sensitizers.
Poly 100 "A" Sand & ETHYL ACETATE & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, BETA-ISOMER	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound.
Poly 100 "A" Sand & METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL SEBACATE & BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE & DI-CG 20-568 ETHOXYLATED	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema.
Poly 100 "A" Sand & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, BETA-ISOMER	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). Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on the reproductive organs, the developing embryo and foetus, blood or thymus gland, are not seen with the commercial-grade propylene glycol ethers.
Poly 100 "A" Sand & PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER	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.
ETHYLBENZENE & ETHYL-3-ETHOXYPROPIONATE	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.
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL SEBACATE & DI-CG 20-568 ETHOXYLATED	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 sensitisation	✔	STOT - Repeated Exposure	✘
Mutagenicity	✘	Aspiration Hazard	✘

Legend: ✘ – Data either not available or does not fill the criteria for classification
✔ – Data available to make classification

SECTION 12 Ecological information

Toxicity

Poly 100 "A" Sand	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

propylene glycol monomethyl ether acetate, alpha-isomer	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	100mg/l	1
	EC50	72h	Algae or other aquatic plants	>1000mg/l	2
	EC50	48h	Crustacea	373mg/l	2
	NOEC(ECx)	336h	Fish	47.5mg/l	2
	EC50	96h	Algae or other aquatic plants	>1000mg/l	2

Continued...

Poly 100 "A" Sand

	Endpoint	Test Duration (hr)	Species	Value	Source
	ethylbenzene	LC50	96h	Fish	3.381-4.075mg/L
EC50		72h	Algae or other aquatic plants	2.4-9.8mg/l	4
EC50		48h	Crustacea	1.37-4.4mg/l	4
EC50(ECx)		24h	Algae or other aquatic plants	0.02-938mg/l	4
EC50		96h	Algae or other aquatic plants	1.7-7.6mg/l	4
ethyl acetate	LC50	96h	Fish	>75.6mg/l	2
	EC50	72h	Algae or other aquatic plants	1800-3200mg/l	4
	EC50	48h	Crustacea	164mg/l	1
	EC50	96h	Algae or other aquatic plants	2500mg/l	4
	NOEC(ECx)	72h	Algae or other aquatic plants	>100mg/l	1
propylene glycol monomethyl ether acetate, beta-isomer	Not Available	Not Available	Not Available	Not Available	Not Available
ethyl-3-ethoxypropionate	EC50(ECx)	48h	Crustacea	970mg/l	1
	EC50	72h	Algae or other aquatic plants	>114.86mg/l	2
	LC50	96h	Fish	45.3mg/l	2
	EC50	48h	Crustacea	970mg/l	1
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Not Available	Not Available	Not Available	Not Available	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	EC0(ECx)	24h	Crustacea	<10mg/l	1
	LC50	96h	Fish	0.34mg/l	1
di-CG 20-568 ethoxylated	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Harmful 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.

For Propylene Glycol Ethers: log Kow's range from 0.309 for TPM to 1.523 for DPnB. Calculated BCFs range from 1.47 for DPnB to 3.16 for DPMA and TPM, indicating low bioaccumulation.

For Glycol Ethers:

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

For UV Filters:

Aquatic Fate/Ecotoxicity: UV filters have been detected in surface water, wastewater and fish, and some of them having an action similar to that of an estrogen in fish. At present, little is known about their additional hormonal activities in different hormonal receptor systems despite their increasing use and environmental persistence.

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
ethylbenzene	HIGH (Half-life = 228 days)	LOW (Half-life = 3.57 days)
ethyl acetate	LOW (Half-life = 14 days)	LOW (Half-life = 14.71 days)
propylene glycol monomethyl ether acetate, beta-isomer	LOW	LOW
ethyl-3-ethoxypropionate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
propylene glycol monomethyl ether acetate, alpha-isomer	LOW (LogKOW = 0.56)
ethylbenzene	LOW (BCF = 79.43)
ethyl acetate	HIGH (BCF = 3300)

Continued...

Poly 100 "A" Sand

Ingredient	Bioaccumulation
propylene glycol monomethyl ether acetate, beta-isomer	LOW (LogKOW = 0.5163)
ethyl-3-ethoxypropionate	LOW (LogKOW = 1.0809)

Mobility in soil

Ingredient	Mobility
propylene glycol monomethyl ether acetate, alpha-isomer	HIGH (KOC = 1.838)
ethylbenzene	LOW (KOC = 517.8)
ethyl acetate	LOW (KOC = 6.131)
propylene glycol monomethyl ether acetate, beta-isomer	HIGH (KOC = 1.838)
ethyl-3-ethoxypropionate	LOW (KOC = 10)


SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> ▶ Containers may still present a chemical hazard/ danger when empty. ▶ Return to supplier for reuse/ recycling if possible. <p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.</p> <ul style="list-style-type: none"> ▶ 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 or ID number	1866
UN proper shipping name	Resin Solution, flammable
Transport hazard class(es)	Class 3
	Subsidiary risk Not Applicable
Packing group	III
Environmental hazard	Not Applicable
Special precautions for user	Hazard Label 3
	Special provisions B1, B52, IB3, T2, TP1

Air transport (ICAO-IATA / DGR)

UN number	1866
UN proper shipping name	Resin solution flammable
Transport hazard class(es)	ICAO/IATA Class 3
	ICAO / IATA Subrisk Not Applicable
	ERG Code 3L
Packing group	III
Environmental hazard	Not Applicable
Special precautions for user	Special provisions A3
	Cargo Only Packing Instructions 366
	Cargo Only Maximum Qty / Pack 220 L
	Passenger and Cargo Packing Instructions 355
	Passenger and Cargo Maximum Qty / Pack 60 L

Poly 100 "A" Sand

	Passenger and Cargo Limited Quantity Packing Instructions	Y344
	Passenger and Cargo Limited Maximum Qty / Pack	10 L

Sea transport (IMDG-Code / GGVSee)

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

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

Not Applicable

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

Product name	Group
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available
ethylbenzene	Not Available
ethyl acetate	Not Available
propylene glycol monomethyl ether acetate, beta-isomer	Not Available
ethyl-3-ethoxypropionate	Not Available
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	Not Available
di-CG 20-568 ethoxylated	Not Available

Transport in bulk in accordance with the IGC Code

Product name	Ship Type
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available
ethylbenzene	Not Available
ethyl acetate	Not Available
propylene glycol monomethyl ether acetate, beta-isomer	Not Available
ethyl-3-ethoxypropionate	Not Available
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	Not Available
di-CG 20-568 ethoxylated	Not Available

SECTION 15 Regulatory information

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

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

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

ethylbenzene is found on the following regulatory lists

Poly 100 "A" Sand

Chemical Footprint Project - Chemicals of High Concern List	US CWA (Clean Water Act) - List of Hazardous Substances
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	US CWA (Clean Water Act) - Priority Pollutants
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans	US CWA (Clean Water Act) - Toxic Pollutants
US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants	US DOE Temporary Emergency Exposure Limits (TEELs)
US - California Proposition 65 - Carcinogens	US EPA Integrated Risk Information System (IRIS)
US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens	US EPCRA Section 313 Chemical List
US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List	US NIOSH Recommended Exposure Limits (RELs)
US - Massachusetts - Right To Know Listed Chemicals	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US Clean Air Act - Hazardous Air Pollutants	

ethyl acetate is found on the following regulatory lists

US - Massachusetts - Right To Know Listed Chemicals	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US DOE Temporary Emergency Exposure Limits (TEELs)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US EPA Integrated Risk Information System (IRIS)	US TSCA Section 4/12 (b) - Sunset Dates/Status
US NIOSH Recommended Exposure Limits (RELs)	

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

Chemical Footprint Project - Chemicals of High Concern List	US DOE Temporary Emergency Exposure Limits (TEELs)
US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants	US EPCRA Section 313 Chemical List

ethyl-3-ethoxypropionate is found on the following regulatory lists

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

methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate is found on the following regulatory lists

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

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate is found on the following regulatory lists

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

di-CG 20-568 ethoxylated is found on the following regulatory lists

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

Federal Regulations**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Section 311/312 hazard categories**

Flammable (Gases, Aerosols, Liquids, or Solids)	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	Yes
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	No
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)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
ethylbenzene	1000	454
ethyl acetate	5000	2270

State Regulations

Poly 100 "A" Sand

US. California Proposition 65

WARNING: This product can expose you to chemicals including **ethylbenzene**, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (propylene glycol monomethyl ether acetate, alpha-isomer; ethylbenzene; ethyl acetate; propylene glycol monomethyl ether acetate, beta-isomer; ethyl-3-ethoxypropionate; methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate; bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate; di-CG 20-568 ethoxylated)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (di-CG 20-568 ethoxylated)
Japan - ENCS	No (propylene glycol monomethyl ether acetate, beta-isomer; di-CG 20-568 ethoxylated)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	No (propylene glycol monomethyl ether acetate, beta-isomer)
Taiwan - TCSI	Yes
Mexico - INSQ	No (propylene glycol monomethyl ether acetate, beta-isomer; methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate; di-CG 20-568 ethoxylated)
Vietnam - NCI	Yes
Russia - FBEPH	No (methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate; di-CG 20-568 ethoxylated)
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	03/31/2023
Initial Date	03/28/2023

CONTACT POINT

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

SDS Version Summary

Version	Date of Update	Sections Updated
2.4	03/31/2023	Composition / information on ingredients - Ingredients, Name

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

Continued...

Poly 100 "A" Sand

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Powered by AuthorTe, from Chemwatch.