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NOVAGARD

Reviewed on 02/09/2024

- **1** Identification
 - · Product identifier
 - · Trade name: 500-PV Part B
 - \cdot Details of the supplier of the safety data sheet
 - Manufacturer/Supplier: Novagard Solutions Inc 5109 Hamilton Avenue CLEVELAND, OH 44114 USA
 - · Information department: R&D Department
 - Emergency telephone number: CHEMTREC 1-800-424-9300 (USA) +1 703-741-5970 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

GHS05 Corrosion

Skin Corrosion 1BH314 Causes severe skin burns and eye damage.Eye Damage 1H318 Causes serious eye damage.

Flammable Liquids 4 H227 Combustible liquid.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



- · Signal word Danger
- **Hazard-determining components of labeling:** 3-aminopropyltriethoxysilane
- · Hazard statements
- Combustible liquid.
- Causes severe skin burns and eye damage.
- Precautionary statements
 Keep away from flames and hot surfaces. No smoking.
- Do not breathe dusts or mists.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

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Specific treatment (see on this label). Wash contaminated clothing before reuse. In case of fire: Use CO2, powder or water spray to extinguish. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international re Information pertaining to particular dangers for man and environment: Carbon Black is contained in a mixture and is no longer available to be inhaled. Classification system: NFPA ratings (scale 0 - 4)	(Contd. of page 1) egulations.
Health = 3 Fire = 2 Reactivity = 0	
· HMIS-ratings (scale 0 - 4)	
HEALTH3Health3FIRE2REACTIVITY0	
 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. 	
3 Composition/information on ingredients	
 Chemical characterization: Mixture Description: Mixture of the substances listed below with nonhazardous additions. 	
· Dangerous components:	
919-30-2 3-aminopropyltriethoxysilane	8–12%
1333-86-4 Carbon black	6–8%
Additional information.	

· Additional information:

Carbon Black is incorporated into mixture and no longer available to self-ignite.

4 First-aid measures

· Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

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5 Fire-fighting measures

- · Extinguishing media
- **Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
 Wear protective equipment. Keep unprotected persons away.
 Environmental precautions:
- Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
 Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- Precautions for safe handling
 Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

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 Control parameters Components with limit values that require monitoring at the workplace: The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.
1333-86-4 Carbon black
PEL Long-term value: 3.5 mg/m³ REL Long-term value: 3.5* mg/m³ *0.1 in presence of PAHs;See Pocket Guide Apps.A+C TLV Long-term value: 3* mg/m³ *inhalable fraction, A3
• Additional information: The lists that were valid during the creation were used as basis.
 Exposure controls Personal protective equipment: General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin. Breathing equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. Protection of hands:
Protective gloves
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product 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. Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye protection:
Tightly sealed goggles

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9 Physical and chemical prope	9 Physical and chemical properties			
 Information on basic physical and chemical properties General Information 				
 Appearance: Form: Color: Odor: Odor threshold: 	Liquid Black Mild Not determined.			
· pH-value:	Not determined.			
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. Undetermined.			
· Flash point:	74 °C (165.2 °F)			
· Flammability (solid, gaseous):	Not applicable.			
· Decomposition temperature:	Not determined.			
· Ignition temperature:	Product is not selfigniting.			
· Danger of explosion:	Not determined.			
 Explosion limits: Lower: Upper: 	Not determined. Not determined.			
· Vapor pressure:	Not determined.			
 Density: Relative density Vapor density Evaporation rate 	Not determined. Not determined. Not determined. Not determined.			
 Solubility in / Miscibility with Water: 	Fully miscible.			
· Partition coefficient (n-octanol/wate	er): Not determined.			
 Viscosity: Dynamic: Kinematic: 	Not determined. Not determined.			
· Other information	No further relevant information available.			

10 Stability and reactivity

· Reactivity No further relevant information available.

- Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · **Incompatible materials:** No further relevant information available.

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· Hazardous decomposition products:

Combustion may evolve carbon monoxide, carbon dioxide, silicon dioxide and formaldehyde.

11 Toxicological information

Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 14,833–22,250 mg/kg (rat)

919-30-2 3-aminopropyltriethoxysilane

Oral LD50 1,780 mg/kg (rat)

Dermal LD50 4,000 mg/kg (rabbit)

1333-86-4 Carbon black

Oral LD50 10,000 mg/kg (rat)

Primary irritant effect:

 \cdot on the skin: Caustic effect on skin and mucous membranes.

· on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

· Sensitization: No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Carcinogenic categories

•	rnational Agency for Research on Cancer)
1333-86-4	Carbon black
· NTP (Natio	onal Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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Danger to drinking water if even extremely small quantities leak into the ground.

- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- \cdot Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number · DOT, IMDG, IATA	not regulated
 UN proper shipping name DOT, IMDG, IATA 	not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA · Class	not regulated
 Packing group DOT, IMDG, IATA 	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

 Section 355 (extremely haz 	zardous substances):
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

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· Hazardous Air Pollutants	
None of the ingredients is listed.	
· Proposition 65	
Chemicals known to cause cancer:	
1333-86-4 Carbon black	
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
• TLV (Threshold Limit Value)	
1333-86-4 Carbon black	A4
	,,,,
NIOSH-Ca (National Institute for Occupational Safety and Health) 1333-86-4 Carbon black	
· GHS label elements	
GHS05	
· Signal word Danger	
 Hazard-determining components of labeling: 3-aminopropyltriethoxysilane Hazard statements Combustible liquid. Causes severe skin burns and eye damage. Precautionary statements Keep away from flames and hot surfaces. – No smoking. Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if pr to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse. In case of fire: Use CO2, powder or water spray to extinguish. Store in a well-ventilated place. Keep cool. 	
Store locked up.	
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Dispose of contents/container in accordance with local/regional/national/international regulations. • **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Regulatory Compliance Department
- · Contact: novagard@novagard.net
- Date of preparation / last revision 02/09/2024

Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL: Recommended Exposure Limit** Flammable Liquids 4: Flammable liquids - Category 4 Skin Corrosion 1B: Skin corrosion/irritation - Category 1B Eye Damage 1: Serious eye damage/eye irritation - Category 1 • * Data compared to the previous version altered.