



SAFETY DATA SHEET

Protal 7200 Part B Hardener

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Protal 7200 Part B Hardener

Product number 6140042H

Recommended use of the chemical and restrictions on use

Application Industrial use as a protective coating in prevention of corrosion.

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier See Manufacturer

Manufacturer Denso North America
9710 Telge Road
Houston, TX 77095
1 (281) 821-3355
1 (281) 821-0304
info@densona.com

Emergency telephone number

Emergency telephone 1-801-629-0667

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Muta. 2 - H341 Repr. 2 - H361 STOT SE 2 - H371 STOT RE 1 - H372

Environmental hazards Aquatic Acute 3 - H402 Aquatic Chronic 3 - H412

Supplementary information

The source of the carcinogenic classification is encapsulated within the product mixture. When mixed with Part A, the mixture cures and forms an inert solid and is not considered hazardous. No dust formed during normal use.

Label elements

Hazard symbols



Signal word

Danger

Protal 7200 Part B Hardener

Hazard statements

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H317 May cause an allergic skin reaction.
 H341 Suspected of causing genetic defects.
 H361 Suspected of damaging fertility or the unborn child.
 H371 May cause damage to organs .
 H372 Causes damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
 P202 Do not handle until all safety precautions have been read and understood.
 P234 Keep only in original container.
 P261 Avoid breathing vapor/ spray.
 P262 Do not get in eyes, on skin, or on clothing.
 P263 Avoid contact during pregnancy/ while nursing.
 P264 Wash contaminated skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing must not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P284 In case of inadequate ventilation wear respiratory protection.
 P301+P310 If swallowed: Immediately call a poison center/ doctor.
 P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
 P302+P352 If on skin: Wash with plenty of water.
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 If exposed or concerned: Get medical advice/ attention.
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P337+P313 If eye irritation persists: Get medical advice/ attention.
 P342+P311 If experiencing respiratory symptoms: Call a poison center/ doctor.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

Proprietary Hardener A, Proprietary Hardener B, Proprietary Hardener C, Proprietary Additive A, Proprietary Additive C, Proprietary Additive B, Proprietary Additive D, Proprietary Additive E, Proprietary Additive F

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Protal 7200 Part B Hardener

Proprietary Hardener C	10-30%
CAS number: Proprietary	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Repr. 2 - H361 STOT SE 2 - H371 STOT RE 1 - H372	
Proprietary Hardener B	10-30%
CAS number: Proprietary	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1B - H317 Aquatic Chronic 3 - H412	
Proprietary Hardener A	10-30%
CAS number: Proprietary	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	
Proprietary Additive A	5-10%
CAS number: Proprietary	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1B - H317	

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Proprietary Additive E	5-10%
CAS number: Proprietary	
Classification	
Eye Irrit. 2A - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 4 - H413	
Proprietary Additive D	5-10%
CAS number: Proprietary	
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
Proprietary Additive C	5-10%
CAS number: Proprietary	
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
Proprietary Additive B	5-10%
CAS number: Proprietary	
Classification	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Repr. 2 - H361f	
STOT SE 3 - H335	
Proprietary Additive F	1-5%
CAS number: Proprietary	
Classification	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	

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Proprietary Filler B	<1%
CAS number: Proprietary	
Classification	
Carc. 1B - H350 STOT RE 1 - H372	
Proprietary Solvent C	<1%
CAS number: Proprietary	
Classification	
Flam. Liq. 3 - H226 STOT SE 3 - H335	
Proprietary Solvent B	<1%
CAS number: Proprietary	
Classification	
Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304	
Proprietary Solvent A	<1%
CAS number: Proprietary	
Classification	
Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	
Proprietary Additive H	<1%
CAS number: Proprietary	
M factor (Acute) = 1 M factor (Chronic) = 1	
Classification	
Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

The full text for all hazard statements is displayed in Section 16.

Composition comments The exact percentage/concentration is withheld as a trade secret in accordance with 29 CFR 1910.1200.

4. First-aid measures

Description of first aid measures

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General information	Get medical attention if any discomfort continues. Chemical burns must be treated by a physician. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. Rinse nose and mouth with water. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention if symptoms are severe or persist. In the event of any sensitization symptoms developing, ensure further exposure is avoided.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. Keep affected person under observation. Get medical attention if symptoms are severe or persist. Chemical burns must be treated by a physician.
Skin Contact	It is important to remove the substance from the skin immediately. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Continue to rinse for at least 15 minutes and get medical attention. Chemical burns must be treated by a physician. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Wash clothing and clean shoes thoroughly before reuse. Following contact with hot product, immediately immerse affected area in, or flush with, large amounts of cold water to dissipate heat and cover with clean cotton sheeting or gauze. Get medical attention immediately. In the event of any sensitization symptoms developing, ensure further exposure is avoided.
Eye contact	May cause permanent damage if eye is not immediately irrigated. Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention. Do not rub eye.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that airborne contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.
<u>Most important symptoms and effects, both acute and delayed</u>	
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	This product is corrosive. The product contains a sensitizing substance. May cause allergy or asthma symptoms or breathing difficulties if inhaled. A single exposure may cause the following adverse effects: Severe irritation of nose and throat. Prolonged or repeated exposure may cause the following adverse effects: Corrosive to the respiratory tract.
Ingestion	This product is corrosive. Harmful if swallowed. Symptoms following overexposure may include the following: May cause chemical burns in mouth, esophagus and stomach. May cause sensitization or allergic reactions in sensitive individuals. Symptoms following overexposure may include the following: Nausea, vomiting. Diarrhea. May cause skin sensitization or allergic reactions in sensitive individuals.

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Skin contact	This product is corrosive. Causes severe skin burns and eye damage. Prolonged or repeated exposure to vapors in high concentrations may cause the following adverse effects: Chemical burns. Blistering may occur. Pain. Redness. Eczema/contact dermatitis. May cause skin sensitization or allergic reactions in sensitive individuals.
Eye contact	This product is corrosive. Causes severe skin burns and eye damage. Symptoms following overexposure may include the following: Chemical burns. Severe irritation, burning, tearing and blurred vision. Redness. Profuse watering of the eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Severe corrosive hazard. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Very toxic or corrosive gases or vapors.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Do not touch or walk into spilled material. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray/mists. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place.

Environmental precautions

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Environmental precautions The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Stop leak if safe to do so. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Approach the spillage from upwind. Small Spillages: Collect spillage. Large Spillages: If leakage cannot be stopped, evacuate area. Contain and absorb spillage with sand, earth or other non-combustible material. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid breathing gas, fume, vapours or spray. Avoid contact with skin, eyes and clothing. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid discharge into drains and the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Use only outdoors or in a well-ventilated area.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Use appropriate containment to avoid environmental contamination. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Corrosive storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

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Occupational exposure limits

Proprietary Hardener B

Ceiling exposure limit: ACGIH 0.1 mg/m³

Sk

Proprietary Filler B

Long-term exposure limit (8-hour TWA): OSHA 0.05 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): ACGIH 0.025 mg/m³ respirable fraction

A2

Proprietary Solvent C

Long-term exposure limit (8-hour TWA): ACGIH 25 ppm 145 mg/m³

Long-term exposure limit (8-hour TWA): OSHA 50 ppm 290 mg/m³

Proprietary Solvent B

Long-term exposure limit (8-hour TWA): OSHA 100 ppm 435 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 87 mg/m³

A3

Proprietary Solvent A

Long-term exposure limit (8-hour TWA): OSHA 100 ppm 435 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 100 ppm 434 mg/m³

Short-term exposure limit (15-minute): ACGIH 150 ppm 651 mg/m³

A4

Proprietary Additive H

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ inhalable fraction and vapor

A4

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

Sk = Danger of cutaneous absorption.

A4 = Not Classifiable as a Human Carcinogen.

A2 = Suspected Human Carcinogen.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Ingredient comments No dust formed during normal use.

Proprietary Solvent C

Immediate danger to life and health 500 ppm

Proprietary Filler B

Immediate danger to life and health 25 mg/m³ 50 mg/m³

Proprietary Solvent B

Immediate danger to life and health 800 ppm

Proprietary Solvent A

Immediate danger to life and health 2500 ppm

Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Contaminated work clothing should not be allowed out of the workplace. Persons susceptible to allergic reactions should not handle this product. Take off immediately all contaminated clothing and wash it before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

The use of a respirator is normally not required for outdoor application and areas with adequate ventilation. Do not use in confined spaces without adequate ventilation and/or respirator. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. When spraying, wear a respirator fitted with the following cartridge: Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. If dust is generated: Wear a suitable dust mask.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Information on basic physical and chemical properties

Protal 7200 Part B Hardener

Appearance	Slightly viscous liquid.
Color	Green.
Odor	Irritating. Ammonia.
Odor threshold	Not determined.
pH	> 8
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	> 93°C (200°F)
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapor pressure	Not determined.
Vapor density	> 1
Relative density	~ 1.07
Bulk density	Not determined.
Solubility(ies)	Slightly soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	~5,500 cP @ 25°C/77°F
Explosive properties	Not determined.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidizing properties	Not applicable.

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	The following materials may react strongly with the product: Strong acids. Alcohols, glycols. Strong alkalis. Epoxides. Isocyanates. Strong oxidizing agents. Phenols, cresols.
Conditions to avoid	Avoid excessive heat for prolonged periods of time. Containers can burst violently or explode when heated, due to excessive pressure build-up.

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Materials to avoid	Mineral acids. Alcohols, glycols. Strong alkalis. Epoxides. Isocyanates. Strong oxidizing agents. Phenols, cresols.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapors.

11. Toxicological information

Information on toxicological effects

Toxicological effects When mixed with Part A, the mixture cures and forms an inert solid and is not considered hazardous.

Acute toxicity - oral

Notes (oral LD₅₀) Acute Tox. 4 - H302 Harmful if swallowed.

ATE oral (mg/kg) 738.16

Acute toxicity - dermal

Notes (dermal LD₅₀) Acute Tox. 3 - H311 Toxic in contact with skin.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 28.5

Skin corrosion/irritation

Animal data Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitization

Respiratory sensitization Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization May cause skin sensitization or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro Suspected of causing genetic defects.

Carcinogenicity

Summary Contains a substance which may cause cancer by inhalation. Due to the physical nature of this product, exposure by this route is unlikely. The source of the carcinogenic classification is encapsulated within the product mixture. No dust formed during normal use.

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility Suspected of damaging fertility.

Reproductive toxicity - development Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure	STOT RE 1 - H372 May cause damage to organs through prolonged or repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	Avoid contact during pregnancy/while nursing. May cause genetic defects. Contains a substance which may cause cancer by inhalation. Due to the physical nature of this product, exposure by this route is unlikely. The source of the carcinogenic classification is encapsulated within the product mixture. No dust formed during normal use. May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause sensitization or allergic reactions in sensitive individuals. Corrosive to the respiratory tract. Symptoms following overexposure may include the following: Severe irritation of nose and throat.
Ingestion	May cause sensitization or allergic reactions in sensitive individuals. May cause chemical burns in mouth, esophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.
Skin Contact	May cause skin sensitization or allergic reactions in sensitive individuals. Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.

12. Ecological information

Ecotoxicity	The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnia. However, large or frequent spills may have hazardous effects on the environment. When mixed with Part A, the mixture cures and forms an inert solid and is not considered hazardous.
Toxicity	Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.
<u>Persistence and degradability</u>	
Persistence and degradability	The degradability of the product is not known.
<u>Bioaccumulative potential</u>	
Bio-Accumulative Potential	No data available on bioaccumulation.
Partition coefficient	Not determined.
<u>Mobility in soil</u>	
Mobility	No data available.
<u>Other adverse effects</u>	
Other adverse effects	None known.

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13. Disposal considerations

Waste treatment methods

General information

The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods

Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

UN Number

UN No. (TDG)	3066
UN No. (IMDG)	3066
UN No. (ICAO)	3066
UN No. (DOT)	UN3066

UN proper shipping name

Proper shipping name (TDG)	PAINT
Proper shipping name (IMDG)	PAINT
Proper shipping name (ICAO)	PAINT
Proper shipping name (DOT)	PAINT

Transport hazard class(es)

DOT hazard class	8
DOT hazard label	8
TDG class	8
TDG label(s)	8
IMDG Class	8
ICAO class/division	8

Transport labels



DOT transport labels



Protal 7200 Part B Hardener

Packing group

TDG Packing Group	II
IMDG packing group	II
ICAO packing group	II
DOT packing group	II

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

EmS	F-A, S-B
DOT reportable quantity	RQ: Ethylbenzene (6250000 lbs), RQ: Xylene (625000 lbs)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The following ingredients are listed or exempt:

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

Proprietary Solvent B

Final CERCLA RQ: 1000(454) pounds (Kilograms)

Proprietary Solvent A

Final CERCLA RQ: 100(45.4) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

Proprietary Additive B

1.0 %

Proprietary Solvent B

0.1 %

Proprietary Solvent A

1.0 %

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

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SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The following ingredients are listed or exempt:

Proprietary Additive B

Developmental toxin and reproductive toxin.

Proprietary Solvent B

Carcinogen.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

Proprietary Additive B

Proprietary Solvent B

Proprietary Solvent A

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Hardener A

Proprietary Additive B

Proprietary Filler B

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler B

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler B

Protal 7200 Part B Hardener

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Hardener A

Proprietary Additive B

Proprietary Filler B

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Hardener A

Proprietary Additive B

Proprietary Filler B

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

Inventories

US - TSCA

The following ingredients are listed or exempt:

Proprietary Hardener A

Proprietary Additive D

Proprietary Additive C

Proprietary Additive B

Proprietary Filler B

Proprietary Solvent C

Proprietary Solvent B

Proprietary Solvent A

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Protal 7200 Part B Hardener

Abbreviations and acronyms used in the safety data sheet

TDG: The transport of dangerous goods act

IATA: International air transport association.

ICAO: Technical instructions for the safe transport of dangerous goods by air.

IMDG: International maritime dangerous goods.

CAS: Chemical abstracts service.

ATE: Acute toxicity estimate.

LC₅₀: Lethal concentration to 50 % of a test population.

LD₅₀: Lethal dose to 50% of a test population (median lethal dose).

EC₅₀: 50% of maximal effective concentration.

PBT: Persistent, bioaccumulative and toxic substance.

vPvB: Very persistent and very bioaccumulative.

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity

Eye Dam. = Serious eye damage

Muta. = Germ cell mutagenicity

Repr. = Reproductive toxicity

Skin Corr. = Skin corrosion

Skin Sens. = Skin sensitisation

STOT RE = Specific target organ toxicity-repeated exposure

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Training advice

Only trained personnel should use this material.

Issued by

HS&E Manager.

Revision date

12/17/2020

Revision

7

Supersedes date

9/10/2020

SDS No.

5020

Protal 7200 Part B Hardener

Hazard statements in full

H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H361f Suspected of damaging fertility.
H371 May cause damage to organs .
H371 May cause damage to organs (Central nervous system, Eyes, Nervous system).
H372 Causes damage to organs (Blood system, Liver, Lungs, Kidneys, Skin) through prolonged or repeated exposure.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H402 Harmful to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.