



GAP PROFESSIONAL PRODUCTS

Safety Data Sheet Body Armour X Marine - Ceramic coating

SECTION 1: Identification

1.1 Product identifier

Product name Body Armour X Marine - Ceramic coating

Product number 7788

1.3 Recommended use of the chemical and restrictions on use

Ceramic Paint Coating for marine

1.4 Supplier's details

Name GAP Professional Products
Address 122 Route 105
Keswick Ridge NB E6L 1B1
Canada

Telephone (506) 363-9708
Fax (506) 363-4241
email info@gapauto.com

1.5 Emergency phone number(s)

For Medical or Transport Emergencies / Pour les urgences médicales ou de transport
CANUTEC (24 Hours)
(613) 996-6666

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: WHMIS 2015

- Toxic to reproduction, Cat. 2
- Aspiration hazard, Cat. 1
- Flammable liquids, Cat. 4
- Hazardous to the aquatic environment, long-term (chronic), Cat. 2

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- Specific target organ toxicity following single exposure, Cat. 3
- Skin corrosion/irritation, Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



1. Flame; 2. Exclamation mark; 3. Health hazard

Signal word

Danger

Hazard statement(s)

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H361	Suspected of damaging fertility or the unborn child [effect, route]
H412	Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P331	Do NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	In case of fire: Use ... to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component	Concentration
poly siloxazane (CAS no.: 475645-84-2) CLASSIFICATIONS: Acute toxicity, oral, Cat. 4; Flammable liquids, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 3; Serious eye damage/eye irritation, Cat. 1; Skin corrosion/irritation, Cat. 1B. HAZARDS: No data available.	10 - < 25 % (weight)
Distillates, petroleum, hydrotreated light (CAS no.: 64742-47-8; EC no.: 265-149-8) CLASSIFICATIONS: Aspiration hazard, Cat. 1; Flammable liquids, Cat. 4; Hazardous to the aquatic environment, long-term (chronic), Cat. 2; Specific target organ toxicity following single exposure, Cat. 3; Skin corrosion/irritation, Cat. 2. HAZARDS: H227 - Combustible liquid; H304 - May be fatal if swallowed and enters airways; H315 - Causes skin irritation; H335 - May cause respiratory irritation; H336 - May cause drowsiness or dizziness; H411 - Toxic to aquatic life with long lasting effects.	10 - < 25 % (weight)
Siloxanes and Silicones, di-Me, hydroxy-terminated, reaction products with trimethoxymethylsilane and N1-[3-(trimethoxysilyl)propyl]-1,2-ethanediamine (CAS no.: 69430-37-1) CLASSIFICATIONS: No data available. HAZARDS: No data available.	5 - < 10 % (weight)
OCTAMETHYLCYCLOTETrasiloxane (CAS no.: 556-67-2; EC no.: 209-136-7; Index no.: 014-018-00-1) CLASSIFICATIONS: Toxic to reproduction, Cat. 2; Hazardous to the aquatic environment, long-term (chronic), Cat. 4; Flammable liquids, Cat. 3. HAZARDS: H361f - ; H413 - May cause long lasting harmful effects to aquatic life.	1 - < 5 % (weight)

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SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Do not leave affected person unattended. Remove victim out of the danger area. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.
If inhaled	If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention
In case of skin contact	Wash off with soap and plenty of water.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
If swallowed	Rinse mouth with water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms/effects, acute and delayed

Symptoms and effects are not known to date

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Regular foam, waterfog, carbon dioxide or dry chemical. Keep containers cool with water spray using fog nozzles.

5.2 Specific hazards arising from the chemical

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures

5.3 Special protective actions for fire-fighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs. See Section 8 for recommended personal protective equipment. Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never

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place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs. See Section 8 for recommended personal protective equipment.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Dilute spill with plenty of water.

6.3 Methods and materials for containment and cleaning up

LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent.

SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Put on appropriate personal equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Keep in original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials(see Section 10) and food and drink. Do not store under freezing conditions or above 49 C (120 F). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep out of reach from children.

Specific end use(s)

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. OCTAMETHYLCYCLOTETRASILOXANE (CAS: 556-67-2 EC: 209-136-7)

DNEL, Worker - acute effects local (Inhalation): 73 mg/m³

DNEL, Worker - chronic effects local (Inhalation): 73 mg/m³

DNEL, Worker - acute effects systemic (Inhalation): 73 mg/m³

DNEL, Worker - chronic effects systemic (Inhalation): 73 mg/m³

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Recommended: Chemical splash goggles

Skin protection

Wear Nitrile gloves, chemical resistant gloves.

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Body protection

Skin Protection: Protective gloves (for hands). Long sleeve shirts and pants should be worn to protect exposed skin.

Respiratory protection

Recommended: Dust mask or Respirator should be worn if product is used in confined space or used for a prolonged period of time.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Clear liquid
Odor	Solvent odour
Odor threshold	
pH	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	64.6 °C
Flash point	44 – 48 °C at 101.3 kPa 112 – 119 °F at 1 atm
Evaporation rate	Not determined
Flammability (solid, gas)	product mist may be flammable
Upper/lower flammability limits	Lower explosion limit (LEL) 0.6 vol% Upper explosion limit (UEL) 4.9 vol%
Vapor pressure	132 Pa at 25 °C
Vapor density	Not Determined
Relative density	0.97 g/ml at 25 °C 8.11 lb/gal at 25 °C
Solubility(ies)	Not Determined
Partition coefficient: n-octanol/water	Not Determined
Auto-ignition temperature	215 °C Auto-ignition temperature (liquids and gases) 645.2 K Relative self-ignition temperature for solids
Decomposition temperature	Not Determined
Viscosity	Thin Liquid
Explosive properties	
Oxidizing properties	

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Will not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Avoid contact with acids and strong oxidizers such as permanganate, chlorine, ectoderm. Do not store near acids, carbon dioxide (CO₂), and strong oxidizers such as permanganate, chlorine, ectoderm.

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Distillates, petroleum, hydrotreated light: Strong oxidizing agents, Strong bases, Strong acids, Amines

10.6 Hazardous decomposition products

After water evaporates, burning may produce oxides of carbon, traces of sulfur and nitrogen oxides and various hydrocarbons

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Distillates, petroleum, hydrotreated light

LC0 Inhalation - Rat - 4951 mg/m³ - 4 h

Result: Based on results obtained from tests on analogous products

Distillates, petroleum, hydrotreated light

LD50 Skin - Rabbit - > 5,000 mg/kg

Distillates, petroleum, hydrotreated light

LD50 Oral - Rat - > 5000 mg/kg

poly siloxazane 475645-84-2

oral 301 mg/kg

Skin corrosion/irritation

Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis.

Serious eye damage/irritation

Can cause severe irritation, redness, tearing, blurred vision.

Respiratory or skin sensitization

Breathing of dust or mist can cause mild to severe irritation of nasal or respiratory passage.

Germ cell mutagenicity

No data available

Carcinogenicity

Carcinogenicity: Ingredients not listed by OSHA, NTP, IARC.

Reproductive toxicity

No data available

Summary of evaluation of the CMR properties

Not Available

STOT-single exposure

Primary route of entry: A) Skin B) Inhalation

STOT-repeated exposure

Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to product.

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Additional information

OCTAMETHYLCYCLOTETRASILOXANE: ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral Rat > 2,000 mg/kg LD50

Skin Rat > 2,400 mg/kg LD50

Skin Rabbit > 4,640 mg/kg LD50

Oral Rat 1540 mg/kg LD50

Remarks: Behavioral:Tremor.

Inhalation Rat 36,000 mg/m³ LC50

Remarks: Behavioral:Excitement. Lungs, Thorax, or

Respiration:Dyspnea. Skin and Appendages: Other: Hair.

Skin Rat 1770 mg/kg LD50

Remarks: Behavioral:Tremor. Gastrointestinal:Changes in structure or function of salivary glands. Liver:Other changes.

Skin Rabbit 794 UL/KG LD50

Remarks: Kidney, Ureter, Bladder:Hematuria.

IRRITATION DATA

Skin Rabbit 500 mg 24H

Remarks: Mild irritation effect

Eyes Rabbit 500 mg 24H

Remarks: Mild irritation effect

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Result: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Species: Rat

Dose: 500 PPM

Route of Application: Inhalation

Exposure Time: (70D MALE/70D PRE-3W POST)

Result: Effects on Newborn: Live birth index (# fetuses per litter; measured after birth).

SECTION 12: Ecological information

Toxicity

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octamethylcyclotetrasiloxane 556-67-2
LC50 10 µg/l fish 14 d

octamethylcyclotetrasiloxane 556-67-2
EC50 >500 mg/l aquatic invertebrates 24 h

decamethylcyclopentasiloxane 541-02-6
LC50 >16 µg/l fish 14 d

decamethylcyclopentasiloxane 541-02-6
EC50 >15 µg/l aquatic invertebrates 21 d

Distillates (petroleum), hydrotreated light 64742-47-8
LL50 17 mg/l fish 24 h

Distillates (petroleum), hydrotreated light 64742-47-8
EL50 4.6 mg/l aquatic invertebrates 24 h

Persistence and degradability

octamethylcyclotetrasiloxane 556-67-2
carbon dioxide generation
Degradation Rate: 3.7 %
Time: 29 d

methanol 67-56-1
oxygen depletion
Degradation Rate: 76 %
Time: 5 d

Bioaccumulative potential

octamethylcyclotetrasiloxane 556-67-2
BCF: 12,400
Log KOW: 6.488 (25.1 °C)

decamethylcyclopentasiloxane 541-02-6
BCF: 7,060
Log KOW: 8.023 (25.3 °C)

Distillates (petroleum), hydrotreated light 64742-47-8
Log KOW >4

methanol 67-56-1
Log KOW: -0.77

SECTION 13: Disposal considerations

Disposal of the product

Dispose of accordance in local, and provincial regulations for biodegradable detergents.

SECTION 14: Transport information

14.1 UN Number

1993

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14.2	UN Proper Shipping Name	Octamethylcyclotetrasiloxane Poly siloxazane
14.3	Transport hazard class(es)	3
14.4	Packing group	3

Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The cargo is not intended to be carried in bulk.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Canadian Domestic Substances List (DSL)

Canadian Non-Domestic Substances List (NDSL)

SECTION 16: Other information

16.1 Further information/disclaimer

These SDS are written in an effort to provide information to the worker in the workplace and in such a way it can be understood. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

16.2 Preparation information

Prepared by: C. Gourley