




## 1 – IDENTIFICATION

IDENTIFIER	<b>Graphene</b>
PRODUCT CODE	9000
RECOMMENDED USE	Automotive ceramic coating.
RESTRICTIONS ON USE	Do not mix with other products.
SUPPLIER / MANUFACTURER	AUTO-CHEM INC 33 de Lyon Repentigny, QC J5Z 4Z3 450-654-9292 www.autochem.com
EMERGENCY TELEPHONE	CANUTEC 1-613-996-6666 (24 hours)

## 2 – HAZARD IDENTIFICATION

CLASSIFICATION	Flammable liquid 3 Skin irritation 2 Severe eye damage 1 Reproductive toxicity 2	
LABEL ELEMENTS		
SIGNAL WORD	DANGER	
HAZARD STATEMENT	H226 H315 H318 H361f	Flammable liquid and vapour. Causes skin irritation. Causes serious eye damage. Suspected of damaging fertility or the unborn child.
PRECAUTIONARY STATEMENTS – PREVENTION	P202 P210 P233 P240 P241 P242 P243 P280	Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves / protective clothing / eye protection / face protection.
PRECAUTIONARY STATEMENTS – RESPONSE	P302+P352 P303+P361+P353 P305+P351+P338 P310	IF ON SKIN: Wash with plenty of water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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.

	P321 P362+P364 P370+P378	Specific treatment (see on this label). Take off contaminated clothing and wash it before reuse. In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
PRECAUTIONARY STATEMENTS – STORAGE	P403+P235 P233 P405	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
PRECAUTIONARY STATEMENTS - ELIMINATION	P501	Dispose contents/containers according to municipal, provincial and federal regulations.
OTHER HAZARDS	Not applicable.	

### 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	C.A.S	CONCENTRATION
Octamethylcyclotetrasiloxane	556-67-2	0.1 – 1 *
Alkyl Polysilicate	Not available	1 – 5 *
Ambient temperature curable refractory resin B	Not available	10 – 30 *
Decamethylcyclopentasiloxane	541-02-6	10 – 30 *
Distillates (petroleum), hydrotreated light	64742-47-8	5 – 10 *

\* TRADE SECRET STATEMENT: The exact concentration of composition has been withheld as a trade secret.

### 4 – FIRST AID MEASURES

ROUTE OF EXPOSURE	Inhalation, eyes, skin, ingestion
INHALATION	IF INHALED: If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.
DERMAL	IF ON SKIN: Wash with plenty of soap and water.
OCULAR	IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing.
ORAL	Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.
NOTE TO PHYSICIAN	Specific treatment: Treat symptomatically.

### 5 – FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Water spray, BC-powder, Carbon dioxide (CO <sub>2</sub> ).
UNSUITABLE EXTINGUISHING MEDIA	Direct water jet may cause dispersion of material and spread the fire.
SPECIFIC HAZARDS	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ). None In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors 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.
PROTECTIVE EQUIPMENT	Fire-fighters must wear protective equipment and NIOSH approved self-contained breathing apparatus.

PRECAUTIONS	In case of fire and/or explosion do not breathe fumes. Coordinate 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.
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## 6 – ACCIDENTAL RELEASE MEASURES

PROTECTIVE EQUIPMENT	Wear appropriate respiratory equipment (See Section 8). Avoid direct contact with product. Remove non-essential personnel.
CONTAINMENT AND CLEAN UP	Ventilate spill area. Stop spill if safe to do so. Contain and absorb with an inert absorbing material for future disposal (See Section 13). Prevent spill from entering sewers or waterways. Retain water run-off if applicable. Inform proper authorities if necessary.
ENVIRONMENTAL PRECAUTIONS	Avoid entering sewers, waterways or restricted areas. Eliminate according to municipal, provincial and federal regulations.

## 7 – HANDLING AND STORAGE

HANDLING	Containers must be identified correctly. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Handle in a well ventilated area. Avoid breathing dust, vapours or mists. Avoid contact with eyes, skin and clothes. Keep containers closed when not in use. Empty containers may contain residues and must be handled as hazardous waste. Maintain good personal hygiene before eating, drinking or smoking. Do not eat, drink or smoke while using the product or in proximity. Wash contaminated clothing before reuse.
STORAGE	Store in a well-ventilated place. Keep cool. Store away from incompatible materials. Keep containers closed.
INCOMPATIBLE MATERIALS	Strong oxidizing agents, acids, alkalis.

## 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CHEMICAL NAME	C.A.S.	SOURCE	VALUE
Distillats de pétrole, fraction légère hydrotraîtée	64742-47-8	ACGIH	VEMP 1200 mg/m <sup>3</sup> , 197 ppm

ENGINEERING CONTROLS	Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels to an acceptable level.
RESPIRATORY PROTECTION	Maintain atmospheric concentrations below exposure limits. If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied air respirator.
PROTECTIVE EQUIPMENT AND CLOTHING	Wear chemical / impermeable gloves or other protective clothing to prevent repeated or continuous contact with the skin during handling and usage. Wear goggles to prevent mist, vapours or dust to contact eyes. Insure that eyewash stations, showers and cleaning stations are near to work station.
OCULAR PROTECTION	Chemical goggles; also wear a face shield if splashing hazard exists.
GENERAL HYGIENE RECOMMENDATIONS	Ensure that eyewash stations and safety showers are proximal to the work-station location. Avoid production of high concentrations of dust, vapours or mists. Avoid

contact with skin and eyes. Avoid breathing dust, vapours or mists. Never eat, drink or smoke near work stations. Good hygiene is recommended after using this product. Clean clothing before reuse.

## 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Grey liquid.
ODOUR	Characteristic.
ODOUR TRESHOLD	Not available.
pH	Not available.
MELTING / FREEZING POINT	Not available.
INITIAL BOILING POINT	>65 °C à 1 atm.
FLASH POINT	55 °C à 101 kPa 131 °F à 760 mmHg
EVAPORATION RATE	Not available.
FLAMMABILITY	Flammable liquid and vapour.
LOWER FLAMMABLE/EXPLOVISE LIMIT	0.6 % vol.
UPPER FLAMMABLE/EXPLOSIVE LIMIT	4.9 % vol.
VAPOUR PRESSURE	132 Pa à 25 °C.
VAPOUR DENSITY	Not available.
RELATIVE DENSITY	Not available.
SOLUBILITY (in water)	Insoluble.
PARTITION COEFFICIENT (n-octanol/water)	Not available.
AUTO-IGNITION TEMPERATURE	262 °C (auto-ignition temperature (liquids and gases))
DECOMPOSITION TEMPERATURE	Not available.
VOC	Not available.
VISCOSITY	Not available.

## 10 – STABILITY AND REACTIVITY

REACTIVITY	Stable under recommended usage.
CHEMICAL STABILITY	Stable under normal usage conditions.
HAZARDOUS REACTIONS	Polymerization will not occur.
CONDITIONS TO AVOID	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
INCOMPATIBLE MATERIALS	Strong oxidizing agents, acids, alkalis.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon oxides.
ADDITIONAL INFORMATION	None.

## 11 – TOXICOLOGICAL INFORMATION

ACUTE EFFECTS	
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INHALATION	Irritation of the respiratory tract, headaches, dizziness, nausea, loss of coordination, loss of consciousness.
DERMAL	Causes skin irritation. Redness, itching, dryness of the skin.
OCULAR	Causes severe eye irritation. Pain, redness, tearing, may cause damage to the cornea.
ORAL	No data.
CHRONIC EFFECTS	
INHALATION	No data.
DERMAL	No data.
OCULAR	No data.
ORAL	No data.
ADDITIONAL INFORMATION	
CARCINOGENIC EFFECTS (IARC)	
MUTAGENIC EFFECTS	No data.
TERATOGEN EFFECTS	No data.
REPRODUCTION	Fetotoxic in animals.
SENSIBILISATION	No data.
TARGET ORGANS	No data.
AGGRAVATED CONDITIONS	No data.
SYNERGISTIC SUBSTANCES	No data.

## 12 – ECOLOGICAL INFORMATION

octamethylcyclotetrasiloxane	556-67-2
LC50 >22 µg/L, 96h	Fish
EC50 296 - >1,000 mg/L, 96h	Aquatic invertebrates

Decamethylcyclopentasiloxane	541-02-6
LC50 >16 µg/L, 96h	Fish
EC50 >2.9 mg/L, 48h	Aquatic invertebrates

PERSISTENCE AND DEGRADABILITY	Not available.
BIOACCUMULATIVE POTENTIAL	The substance fulfills the very bioaccumulative criterion.
SOIL MOBILITY	Not available.
OTHER ADVERSE EFFECTS	Not available.
ADDITIONAL INFORMATION	Do not let material or fire-fighting water run-off enter sewers or waterways. Obstruct drains and ditches. Affected areas must be cleaned and restored to their original conditions or to the satisfaction of the authorities.


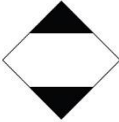
## 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
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## CONTAMINATED PACKAGING

Empty containers should be recycled or disposed of through an approved waste management facility.

**14 – TRANSPORT INFORMATION**

TRANSPORT OF DANGEROUS GOODS (CANADA)				
UN NUMBER	PROPER SHIPPING NAME	CLASS	PACKING GROUP	PLACARD
UN1993	FLAMMABLE LIQUID, N.O.S. (Octamethylcyclotetrasiloxane, Ambient temperature curable refractory resin B	3	III	
LIMITED QUANTITY: 10 L				
FLASH POINT		55°C		

## MARINE POLLUTANT

Yes.

## SPECIAL PRECAUTIONS

Keep away from sources of ignition and heat.

**15 – REGULATORY INFORMATION**

CANADA	
CEPA	All components of this product are either listed or exempt from listing on the Domestic substances List (DSL).
USA	
TSCA	All components of this product are either listed or exempt from listing on the Toxic Substances Control Act (TSCA) Inventory.

**16 – OTHER INFORMATION**

VERSION	1.0
DATE	March 25, 2021.
PREPARED BY	AUTO-CHEM INC
ABBREVIATIONS	ABBREVIATIONS
ACGIH	American Conference of Governmental Industrial Hygienists
AIHA	American Industrial Hygiene Association
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
CIRC	Centre International pour la Recherche sur le Cancer
CL / LC	Concentration létale /Lethal concentration
DL / LD	Dose létale / Lethal dose
CE / EC	Concentration efficace / Effective concentration
IARC	International Agency for Research on Cancer
LCPE	Loi Canadienne sur la Protection de l'Environnement
LES/NDSL	Liste extérieure des substances / Non domestic substances list
LIS/DSL	Liste intérieure des substances / Domestic substances list
NIOSH	National Institute for Occupational Safety and Health

NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
SIMDUT	Système d'information sur les matières dangereuses utilisées au travail
STEL	Short-term Exposure Limit
STOT	Specific target organ toxicity
TCOC	Toxicité pour certains organes cibles
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
USEPA	United States Environmental Protection Agency
VECD	Valeur exposition courte durée
VEMP	Valeur exposition moyenne pondérée
WHMIS	Workplace Hazardous Materials Information System
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