

Tyre Guard

Date of compilation: 22/11/2022 Revised: 24/02/2023 Version: 2 (Replaced 1)


SECTION 1: IDENTIFICATION

- 1.1 Product identifier:** Tyre Guard
- Other means of identification:**
Non-applicable
- 1.2 Recommended uses and any restrictions on use or supply:**
Relevant uses: Tire repair; technical aerosol
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Supplier's details:**
GARDX INTERNATIONAL LTD
LAKE HOUSE, 2 PORT WAY, PORT SOLENT,
PO6 4TY PORTSMOUTH - UNITED KINGDOM
Phone: +44 (0)1243 376426
product@gardx.co.uk
www.gardx.co.uk

GardX New Zealand Limited
739 Chapel Road,
Howick,
Auckland,
New Zealand 2145

0800 242 739
- 1.4 Emergency phone number:** PC No. 0800 764 766. CNN: 1012486. For 24/7 multilingual advice for spill, leak, fire, exposure or accident, call chemtrec @ +65 3163 8374 or + 64 9 801 0034

SECTION 2: HAZARD IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
Hazardous Substances (Hazard Classification) Notice 2020.:
This product was classified in accordance with Hazardous Substances (Hazard Classification) Notice 2020.
Aerosol 2: Flammable aerosols, Category 2, H223
Aerosol 2: Pressurised container: May burst if heated., H229
- 2.2 Label elements, including precautionary statements:**
Hazardous Substances (Hazard Classification) Notice 2020.:
Warning

Hazard statements:
Aerosol 2: H223 - Flammable aerosol.
Aerosol 2: H229 - Pressurised container: May burst if heated.
Precautionary statements:
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501: Dispose of contents and / or their container according to the separated collection system used in your municipality.
Additional labeling:
Read label before use
Beware: Deliberately sniffing or inhaling concentrated contents can be harmful or fatal
- 2.3 Other hazards which do not result in classification:**
Non-applicable

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Acrylic copolymer in aqueous solution

Components:

In accordance with Part B: Concentration cut-offs for ingredients in mixtures for purpose of section 3 of Consolidated Hazardous Substances (Safety Data Sheets) Notice 2017, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 68476-85-7	Petroleum gases, liquefied, < 0.1 % EC 203-450-8 Flam. Gas 1A: H220; Press. Gas: H280 - Danger	30 - <60 %
CAS: 57-55-6	Propane-1,2-diol (Vp > 0.01 kPa 20 °C)	<10 %

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 First aid instructions according to each relevant route of exposure;:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

By eye contact:

This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS of this product.

4.2 Most important symptoms and effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of medical attention and its urgency:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Information on the appropriate type of extinguishers or fire-fighting agents:

Appropriate type of extinguishers or fire-fighting agents:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂).

Inappropriate type of extinguishers or fire-fighting agents:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Advice on specific hazards that may arise from the substance:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

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SECTION 5: FIRE-FIGHTING MEASURES (continued)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions from accidental spills and release;

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Advice on how to contain and clean up a spill or release:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling:****A.- General precautions for safe use**

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:**A.- Technical measures for storage**

Minimum Temp.: 4 °C

Maximum Temp.: 40 °C

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Occupational exposure limits:**

Substances whose workplace exposure standards (WES) have to be monitored in the work environment:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Workplace exposure standards (WES) and biological exposure indices, Edition 12-1:

Identification	Occupational exposure limits		
Petroleum gases, liquefied, < 0.1 % EC 203-450-8 CAS: 68476-85-7	TWA	1000 ppm	1800 mg/m ³
	STEL		
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6	TWA		10 mg/m ³
	STEL		


8.2 Engineering controls:

A.- Identification of the specific types of personal protective equipment


As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection


Pictogram	PPE	Remarks
 Compulsory use of face mask	Filter mask for particles (Filter type: A2, FFP1)	Replace when an increase in resistance to breathing is observed.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.062 mm, Conditions of use: Splashing)	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using chemical protection gloves

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 °C:	Aerosol
Appearance:	Emulsion
Colour:	Ivory
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Initial boiling point and boiling range:	-42 °C (Propellant)
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	<300000 Pa (300 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20.5 mm ² /s
Concentration:	Non-applicable *
pH:	6.5 - 8.5 (at 60 %)
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Emulsifiable
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	≥349971 - 449963 Pa (≥3.5 - 4.5 bar)

Flammability:

Flash Point:	-104 °C (Propellant)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
Other safety characteristics:	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 List of conditions to avoid or prevent a hazardous situation:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Information on incompatible substances or materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Information on hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Not available

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Ecotoxicity (aquatic and terrestrial):

Not available

12.2 Persistence and degradability:

Not available

12.3 Potential to be bioaccumulative:

Not available

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3.547E-2 N/m (25 °C)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Appropriate and achievable disposal methods:

Special precautions to be taken during disposal:

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

Consolidated Imports and Exports (Restrictions) Prohibition Order (No 2) 2004

Consolidated Hazardous Substances (Disposal) Notice 2017

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to NZS 5433.1:2012 Transport of dangerous goods on land



14.1	UN number:	UN1950
14.2	UN proper shipping name:	AEROSOLS
14.3	UN dangerous goods class and subsidiary risk:	2
	Labels:	2.1
14.4	UN Packing Group:	N/A
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Physico-Chemical properties:	see section 9
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:



14.1	UN number:	UN1950
14.2	UN proper shipping name:	AEROSOLS
14.3	UN dangerous goods class and subsidiary risk:	2
	Labels:	2.1
14.4	UN Packing Group:	N/A
14.5	Marine pollutant:	No
14.6	Special precautions for user	
	Special regulations:	63, 959, 190, 277, 327, 344
	EmS Codes:	F-D, S-U
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	Non-applicable
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2023:

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number:	UN1950
14.2 UN proper shipping name:	AEROSOLS
14.3 UN dangerous goods class and subsidiary risk:	2
Labels:	2.1
14.4 UN Packing Group:	N/A
14.5 Environmental hazards:	No
14.6 Special precautions for user	
Physico-Chemical properties:	see section 9
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

- Substances listed in the Montreal Protocol: Non-applicable
- Substances listed in the Rotterdam Convention: Non-applicable
- Substances listed in the Stockholm Convention: Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Relevant regulatory requirements:

Health and Safety at Work (Hazardous Substances) Regulations 2017
Health and Safety at Work Act 2015
Consolidated Hazardous Substances (Labelling) Notice 2017
Consolidated Hazardous Substances (Packaging) Notice 2017
Consolidated Hazardous Substances (Hazardous Property Controls) Notice 2017
Consolidated Hazardous Substances (Importers and Manufacturers) Notice 2015

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Schedule: Content and format of safety data sheets (clause 7) of Consolidated Hazardous Substances (Safety Data Sheets) Notice 2017

Texts of the legislative phrases mentioned in section 2:

H223: Flammable aerosol.

H229: Pressurised container: May burst if heated.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Hazardous Substances (Hazard Classification) Notice 2020.:

Flam. Gas 1A: H220 - Extremely flammable gas.

Press. Gas: H280 - Contains gas under pressure, may explode if heated.

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<https://www.epa.govt.nz/>

Abbreviations and acronyms:

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SECTION 16: OTHER INFORMATION (continued)

HSNO Act: Hazardous substances and new organisms Act
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

END OF SAFETY DATA SHEET