

TECHNICAL INFORMATION

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: Silver Zinc Galvanising Spray

Product code: 501404078

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: To coat and give protection to bare metal.

1.3. Details of the supplier of the safety data sheet

Company Name: Torqx

Web: www.Torqx-Products.com

1.4 Emergency telephone number

National Health Service (NHS)

NHS England or Scotland: 111

NHS Wales: 0300 0604400

Northern Ireland: Call your local GP

For life-threatening emergencies, call 999 for an ambulance.

TECHNICAL INFORMATION

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Aerosol 1 - H222; Flammable Liq. 4 – H227
Health hazards	EUH066; Eye Irrit. 2 – H319; STOT SE 3 - H400
Environmental hazards	Aquatic Chronic 3 - H412

Classification (1999/45/EEC) Xi;R36. F+;R12. R52/53, R66, R67.

Human Health

Gas or vapour is harmful on prolonged exposure or in high concentration. In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling contents of this container is dangerous and can be fatal.

Environment

The product contains a substance which is harmful to aquatic organisms, and which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards

Pressurised container. Must not be exposed to temperatures above 50 °C. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures.

TECHNICAL INFORMATION CONTINUED

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

Pictogram



Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.
H227 Combustible liquid
H319 Causes serious eye irritation
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P501 Dispose of contents/container in accordance with local regulations.

Supplementary Precautionary statements

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.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P261 Avoid breathing vapour/spray.
P264 Wash contaminated skin thoroughly after handling.
P370+378 In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P313 Get medical advice/attention.
P337 If eye irritation persists:
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P403+235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Supplemental label information

EUH066 Repeated exposure may cause skin dryness or cracking.

TECHNICAL INFORMATION CONTINUED

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	EC No.	CAS No.	Content %	Classification
Trimethylbenzene	203-604-4	108-67-8	5	R10;R37 R51 R53
Solvent naphtha (petroleum),	N/A	64742-95-6	5-10	N/A
Toluene	203-625-9	108-88-3	5-10	R11;R38;R63;R65;R67
ACRYLIC RESIN	N/A	N/A	8	N/A
Zinc Powder	231-175-3	7440-66-6	35-60	N/A
DIMETHYL ETHER	204-065-8	115-10-6	20-30	F+;R12

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues. Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Effects may be delayed. Keep affected person under observation.

Inhalation

Remove affected person from source of contamination. If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel. Symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Get medical attention immediately.

Ingestion

Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

Skin contact

Wash skin thoroughly with soap and water. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Do not rub eye. Get medical attention promptly if symptoms occur after washing.

4.3. Indication of any immediate medical attention and special treatment needed

The following symptoms may occur: Nausea, Headache, Dizziness, Coughing, Breathing Difficulty.

TECHNICAL INFORMATION CONTINUED

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Carbon dioxide (CO₂).

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

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Extremely flammable. Severe explosion hazard when vapours are exposed to flames. Risk of explosion if heated. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during Firefighting

Risk of re-ignition after fire has been extinguished. Risk of explosion. Cool containers exposed to flames with water until well after the fire is out. Use water to keep fire exposed containers cool and disperse vapours.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

TECHNICAL INFORMATION CONTINUED

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up For waste disposal, see Section 13. If leakage cannot be stopped, evacuate area. Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Do not use in confined spaces without adequate ventilation and/or respirator. Mechanical ventilation or local exhaust ventilation may be required. Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and spray/mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep containers upright. Protect against physical damage and/or friction. Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Do not store for long periods. Do not store in large quantities. Store in a cool and well-ventilated place. Keep container dry. Do not store near heat sources or expose to high temperatures.

Storage class Extremely Flammable Aerosol

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

TECHNICAL INFORMATION CONTINUED

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Name	STD	TWA (8 hrs)		STEL (15 mins)	
DIMETHYL ETHER	WEL	400 ppm	766 mg/m ³	500 ppm	958 mg/m ³
Trimethylbenzene	WEL	500 ppm		50 ppm	123 mg/m ³
Toluene	WEL	50 ppm	191 mg/m ³	150 ppm	574 mg/m ³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



Appropriate engineering Controls

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients. Use explosion-proof general and local exhaust ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber.

Other skin and body Protection

Provide eyewash station. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Wash contaminated clothing before reuse. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Do not smoke in work area. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

TECHNICAL INFORMATION CONTINUED

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Silver
Odour	Solvents
Solubility(ies)	Immiscible in water.
Relative density	1.2 – 1.3 Density of base paint
Flash point	< -40°C
Auto-ignition temperature	410 - 580°C
Flammability limit (lower %)	1.8
Flammability limit (upper %)	9.5
Comments	A flash point method is not available for aerosols but the major hazardous component; the propellant has a flash point of < -40°C with flammability limits of 9.5% vol. upper and 1.8% vol. lower. Auto-ignition temperature is 410 - 580°C

9.2. Other information

None known

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Avoid heat, sparks and flames.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not relevant.

TECHNICAL INFORMATION CONTINUED

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong acids, strong alkalis and strong oxidising substances.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation

Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication.

Ingestion

Harmful: may cause lung damage if swallowed. Drowsiness, dizziness, disorientation, vertigo.

Skin contact

Repeated exposure may cause skin dryness or cracking. Contains components which may penetrate the skin.

Eye contact

Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings

In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Arrhythmia, (deviation from normal heartbeat).

Route of entry

Inhalation. Skin absorption.

Target Organs

Central nervous system Respiratory system, lungs Kidneys

Medical Symptoms

Arrhythmia, (deviation from normal heartbeat). Narcotic effect. Vapours may cause drowsiness and dizziness.

TECHNICAL INFORMATION CONTINUED

SECTION 12: Ecological Information

Ecotoxicity The product contains substances which are toxic to aquatic organisms, and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Dangerous for the environment if discharged into watercourses.

12.2. Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

The product contains volatile substances, which may spread in the atmosphere.

12.5. Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

The product contains volatile, organic compounds which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: Transport information

14.1. UN number

UN1950

14.2. UN proper shipping name

AEROSOLS, flammable.

TECHNICAL INFORMATION CONTINUED

14.3. Transport hazard class(es)

ADR/RID/ADN class	2
ADR/RID/ADN label	2.1
IMDG class	2.1
ICAO class/division	2.1

Transport labels



14.4. Packing group

ADR/RID/ADB packing group	None
IMDG packing group	None
ICAO packing group	None

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant	No.
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14.6. Special precautions for user

EMS	F-D, S-U
Tunnel Restriction Code	N/A

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments General updates and tidying of sections.

Revision date 4 May 2023

Revision 3

SDS status Approved.

Risk phrases in full R10 Flammable.
R12 Extremely flammable.
R22 Harmful if swallowed.
R34 Causes burns.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full H319 Causes serious eye irritation
H220 Extremely flammable gas.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated
EUH066 Repeated exposure may cause skin dryness or cracking