



SAFETY DATA SHEET

Power seal lacquer spray - SILVER



1. IDENTIFICATION

A. Product name

-Power seal lacquer spray - SILVER

B. Recommended use and restriction on use

- General use : For coloring metal, cement, furniture etc.
- Restriction on use : Do not use it against a flame.

C. Distributor information

o Distributor Information

- Company name TOOLWAY INDUSTRIES LTD.
- Address 280 Hunter's Valley Road, Woodbridge, ON, Canada L4H 3V9.
www.toolway.com

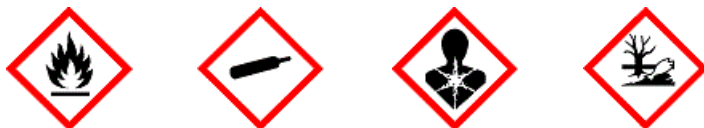
2. HAZARD IDENTIFICATION

A. GHS Classification

Flammable gas: Category 1
 Flammability: Category 2
 Flammable aerosol: Category 1
 High pressure gas: liquefied gas
 Reproductive toxicity: Category 2
 Chronic aquatic environment hazard: Category 1

B. GHS label elements

o Hazard symbols



o Signal words

- Danger

o Hazard statements

H220 extremely flammable gas
 H222 Extremely flammable aerosol
 H225 Highly flammable liquid and vapor
 H229 May explode when heated.
 H280 High-pressure gas: May explode when heated.
 H361 Suspected of causing harm to the fetus or fertility.
 H410 Very toxic to aquatic life with long lasting effects

o Precautionary statements

1) Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools. Flammable liquids (chapter 2.6) 1, 2, 3
- P243 Take precautionary measures against static discharge.
- P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

2) Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P308+P313 If exposed or concerned: Get medical advice/attention.

P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381 Eliminate all ignition sources if safe to do so.

P391 Collect spillage.

3) Storage

P403 Store in a well-ventilated place.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

4) Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
Propane	Dimethylmethane ; Propyl hydride ; n-Propane ; Propyldihydride ;	74-98-6	9 ~ 11
Toluene	Methylbenzene ; Methylbenzol ; Phenyl methane ; Methacide ; Toluol ; 1-Methylbenzene	108-88-3	28 ~ 31
Oxybismethane	Methane, 1,1'-oxybis- ; Methane, oxybis- ; Methoxymethane ; Dimethyl oxide ; Methyl ether ; Oxybismethane ; Methyl oxide ;	115-10-6	42 ~ 45
Aluminium	Allbri aluminum paste and powder ; Aluminium bronze ; Aluminium flake ; Aluminum dehydrated ; Aluminum powder ; Metana ; Metana aluminum paste ; Noral aluminium ;	7429-90-5	1 ~ 5
Petroleum resins	Neopolymer (petroleum resin) ; Hydrocarbon resin ; Hydrocarbons, petroleum resins ;	64742-16-1	5 ~ 9

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.

B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Accidental contact with liquefied gas or refrigerated liquefied gas may cause burn, severe mayhem and perfrigeration, so please take emergency medical action.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- In case of accidental contact with liquefied gas or refrigerated liquefied gas, warm up the contact part with lukewarm water.
- Wash thoroughly after handling.

C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.

- Get medical attention immediately.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

D. Ingestion contact

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.
- If exposed or concerned, get medical attention/advice.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical

- high-pressure gas; May explode when heated.

C. Special protective actions for firefighters

- Move containers from fire area, if you can do without the risk.
- In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.
- Do not access if the tank on fire.
- Use appropriate extinguishing measure suitable for surrounding fire.
- Wear appropriate protective equipment.
- Keep containers cool with water spray.
- Vapor or gas is burned at distant ignition sources can be spread quickly.
- Due to the extremely low flash point, irrigating fire extinguishing may be less effective when put out a fire.
- Leaking gas fire: do not extinguish, unless leak can be stopped safely.
- Remove sources of ignition.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Ventilate closed spaces before entering.
- Do not touch spilled material. Stop leak if you can do it without risk.
- Move container to safe area from the leak area.
- Remove all sources of ignition.
- Do not direct water at spill or source of leak.
- Avoid skin contact and inhalation.
- Cleanup and disposal under expert supervision is advised.
- Keep unauthorized people away, isolate hazard area and deny entry.

B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.

- Small leak: sand or other non-combustible material, please let use absorption.
- Wipe off the solvent.
- Dike for later disposal.
- Avoid entering to sewers or water system.
- Do not use plastic containers.
- Prevent the influx to waterways, sewers, basements or confined spaces.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Avoid contact with incompatible materials.
- Comply with all applicable laws and regulations for handling
- Refer to Engineering controls and personal protective equipment.
- Operators should wear antistatic footwear and clothing.
- Do not inhale the steam prolonged or repeated.
- Avoid contact with heat, sparks, flame or other ignition sources.
- Contaminated work clothing should not be allowed out of the workplace.
- Handling only authorized person.

B. Conditions for safe storage, including any incompatibilities

- Do not apply direct heat.
- Avoid direct sunlight.
- Please pay attention to incompatibilities materials and conditions to avoid.
- No open fire.
- Prevent static electricity and keep away from combustible materials or heat sources.
- Collected them in sealed containers.
- Store away from water and sewer.
- Store in well ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

- **ACGIH TLV**
 - [Propane] : asphyxiant
 - [Toluene] : TWA 20 ppm (75 mg/m³)
 - [Aluminium] : TWA, 1 mg/m³, Respirable Particulate Matter
- **OSHA PEL**
 - [Propane]:1000ppm 1800mg/m³
 - [Toluene]: 200 ppm, C 300 ppm
 - [Aluminium]: 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction)

B. Engineering controls

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

C. Individual protection measures, such as personal protective equipment

- **Respiratory protection**
 - Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
 - Respiratory protection is ranked in order from minimum to maximum.
 - Consider warning properties before use.
 - Any chemical cartridge respirator with organic vapor cartridge(s).
 - Any chemical cartridge respirator with a full facepiece and organic vaporcartridge(s).
 - Any air-purifying respirator with a full facepiece and an organic vapor canister.
 - For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.
- **Eye protection**
 - Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.

- Provide an emergency eye wash station and quick drench shower in the immediate work area.
- **Hand protection**
 - Wear appropriate chemical resistant glove.
- **Skin protection**
 - Wear appropriate chemical resistant protective clothing.
- **Others**
 - Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid
- Color	Silver
B. Odor	Solvent odor
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	Not available
F. Initial Boiling Point/Boiling Ranges	Not available
G. Flash point	Not available
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available
L. Solubility	Not available
M. Vapour density	Not available
N. Specific gravity(Relative density)	0.9±0.05
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	Not available
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	Not available

* Reference

Dimethyl ether

A. Appearance	
- Appearance	Gas
- Color	Transparency
B. Odor	Ether odor
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	-141.5 °C
F. Initial Boiling Point/Boiling Ranges	-23.6 °C
G. Flash point	- 80 °C
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	26.7 / 3.4%
K. Vapour pressure	5.12 hPa at 20 °C
L. Solubility	2.4 / 100ml
M. Vapour density	1.6
N. Specific gravity(Relative density)	0.61
O. Partition coefficient of n-octanol/water	0.1
P. Autoignition temperature	350 °C
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	46.1

Propane

A. Appearance	
- Appearance	Gas , Liquefied gas
- Color	Odorless
B. Odor	unique odor
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	-189.7 °C
F. Initial Boiling Point/Boiling Ranges	-42 °C
G. Flash point	-105 °C
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Flammable gas
J. Upper/Lower Flammability or explosive limits	9.5 / 2.1 %
K. Vapour pressure	840kPa (at 25 °C)
L. Solubility	(Water solubility : 62.4mg/l at 25 °C Solvent availability : Availability : Pure alcohol, Ether, Chloroform, Benzene, turpentine)
M. Vapour density	1.55 ((Air=1))
N. Specific gravity(Relative density)	0.5853 (at -45 C (water=1))
O. Partition coefficient of n-octanol/water	2.36
P. Autoignition temperature	450 °C
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	44.11

10. STABILITY AND REACTIVITY

A. Chemical Stability

- high-pressure gas; May explode when heated.
- May form explosive mixture.

B. Possibility of hazardous reactions

- Contact with other combustible material may cause fire.
- Cylinders exposed to fire may vent and release flammable gas.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces
- Avoid contact with heat, sparks, flame or other ignition sources.

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- (Respiratory tracts)
 - Not available
- (Oral)
 - Not available
- (Eye-Skin)
 - Causes skin irritation

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- Acute toxicity

*** Oral**

- Product (ATEmix) : >5000mg/kg
- [Toluene] : LD50 5580 mg/kg Rat (EU Method B.1) (ECHA)
- [Aluminium] : LD50 > 15900 mg/kg Rat (OECD TG 401)
- [Petroleum resins] : LD50 = 7000 mg/kg Mammals (Thomson)

*** Dermal**

- Product (ATEmix) : >5000mg/kg
- [Toluene] : LD50 >5000 mg/kg Rabbit (ECHA)

*** Inhalation**

- Product (ATEmix) : 0.5mg/L < ATEmix <= 2.0mg/L
- [Propane] : LC50 142500 ppm/4hr Rat (570000 ppm/15min)
- [Toluene] : LC50 >20 mg/ℓ Rat (OECD TG 403) (ECHA)
- [Oxybismethane] : gas LC50 163619 ppm/4 hr Rat (308.5 mg/L/4H)(IUCLID)
- [Aluminium] : Dust LC50 > 0.888 mg/ℓ 4 hr Rat (OECD TG 403, GLP)

○ **Skin corrosion/irritation**

- Causes skin irritation

○ **Serious eye damage/irritation**

- Not available

○ **Respiratory sensitization**

- Not available

○ **Skin sensitization**

- Not available

○ **Carcinogenicity**

*** IARC**

- [Toluene] : Group 3

*** OSHA**

- Not available

*** ACGIH**

- [Toluene] : A4
- [Aluminium] : A4

*** NTP**

- Not available

*** EU CLP**

- Not available

○ **Germ cell mutagenicity**

- Not available

○ **Reproductive toxicity**

- Suspected of damaging fertility or the unborn child

○ **STOT-single exposure**

- Not available

○ **STOT-repeated exposure**

- May cause damage to organs through prolonged or repeated exposure

○ **Aspiration hazard**

- Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

○ **Fish**

- [Propane] : LC50 100 mg/ℓ 96 hr ((Species : Fish TLM)) (IUCLID)
- [Toluene] : LC50 5.5 mg/ℓ 96 hr Oncorhynchus kistutch (ECHA)

○ **Crustaceans**

- [Propane] : LC50 52.157 mg/ℓ 48 hr (Estimate)
- [Toluene] : EC50 3.78mg/L 48hr (ECHA)
- [Aluminium] : IUCLID NOEC > 100 mg/ℓ 48 hr Daphnia magna

○ **Algae**

- [Propane] : LC50 32.252 mg/ℓ 96 hr (Estimate)
- [Aluminium] : NOEC ≥ 0.052 mg/ℓ 72 hr Selenastrum capricornutum (OECD TG 201, GLP)

B. Persistence and degradability

- **Persistence**
 - [Propane] : log Kow 2.36
 - [Toluene] : 2.73 log Kow (20 °C) (ECHA)
 - [Oxybismethane] : log Kow 0.1 (ICSC)
- **Degradability**
 - Not available

C. Bioaccumulative potential

- **Bioaccumulative potential**
 - [Propane] : BCF 13 (HSDB)
- **Biodegradation**
 - [Propane] : 65.7 (%) 35 day
 - [Toluene] : 80 % 20 day (Readily biodegradable) (ECHA)
 - [Oxybismethane] : 5 (%) 28 day (IUCLID)

D. Mobility in soil

- [Oxybismethane] : Koc 27

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- Since more than two kinds of designated waste is mixed, it is difficult to treat separately, then can be reduction or stabilization by incineration or similar process.
- If water separation is possible, pre-process with Water separation process.
- Dispose by incineration.

B. Special precautions for disposal

- The user of this product must dispose by oneself or entrust it to a waste disposer, a person who recycles other's waste or establishes and operates waste disposal facilities.
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN No. (IMDG CODE/IATA DGR)

- 1950

B. Proper shipping name

- AEROSOLS, FLAMMABLE

C. Hazard Class

- 2.1

D. IMDG CODE/IATA DGR Packing group

- Not applicable

E. Marine pollutant

- Applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

- EmS FIRE SCHEDULE : F-D (Flammable gases)
- EmS SPILLAGE SCHEDULE : S-U (Gases (flammable, toxic or corrosive))

15. REGULATORY INFORMATION

A. National and/or international regulatory information

- **POPs Management Law**
 - Not applicable
- **Information of EU Classification**
 - * **Classification**
 - [Propane] : H220
 - [Toluene] : H225, H361d, H304, H373, H315, H336
 - [Oxybismethane] : H220
 - [Aluminium] : H261, H250
 - [Aluminium] : H261, H228
- **U.S. Federal regulations**
 - * **OSHA PROCESS SAFETY (29CFR1910.119)**
 - Not applicable
 - * **CERCLA Section 103 (40CFR302.4)**
 - [Toluene] : 453.599 kg 1000 lb
 - * **EPCRA Section 302 (40CFR355.30)**
 - Not applicable
 - * **EPCRA Section 304 (40CFR355.40)**
 - Not applicable
 - * **EPCRA Section 313 (40CFR372.65)**
 - [Toluene] : Applicable
 - [Aluminium] : Applicable
- **Rotterdam Convention listed ingredients**
 - Not applicable
- **Stockholm Convention listed ingredients**
 - Not applicable
- **Montreal Protocol listed ingredients**
 - Not applicable

16. OTHER INFORMATION

A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Issue date

- 2024.12.31

C. Revision number and Last date revised

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).