according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

### **SECTION 1. IDENTIFICATION**

Product name : PERFECT SILVER SPRAY, 270 g

Product code : 893.114119

Other means of identification : No data available

Manufacturer or supplier's details

Company name of supplier : Würth Canada Limited/Limitée

Address : 345 Hanlon Creek Blvd

GUELPH, ON N1C 0A1

Telephone : 1-800-263-5002

Telefax : 1-905-564-3671

Emergency telephone : Emergencies involving a spill, fire, explosion or exposure:

CHEMTREC (24/7): 1-800-424-9300

Urgences impliquant un déversement, incendie, explosion ou

exposition: CHEMTREC (24/7): 1-800-424-9300

E-mail address : prodsafe@wurth.ca

Recommended use of the chemical and restrictions on use

Recommended use : Solvent-borne coatings

Restrictions on use : Not applicable

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the Hazardous Products Regulations

Aerosols : Category 1

Eye irritation : Category 2A

Specific target organ toxicity

- single exposure

Category 3

Simple Asphyxiant : Category 1

**GHS** label elements

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Hazard pictograms





Signal Word : Danger

Hazard Statements : H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

May displace oxygen and cause rapid suffocation.

Precautionary Statements : Prevention:

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.

P261 Avoid breathing spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area. P280 Wear eye protection and face protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical attention.

Storage:

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C (122 °F).

Disposal:

P501 Dispose of contents and container to an approved waste

disposal plant.

Other hazards

Repeated exposure may cause skin dryness or cracking.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

### Components

| Chemical name | Common       | CAS-No. | Concentration (% w/w) |
|---------------|--------------|---------|-----------------------|
|               | Name/Synonym |         |                       |
| Acetone       | 2-Propanone  | 67-64-1 | >= 10 - < 30 *        |

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

| Propane                     | Dimethylme-<br>thane     | 74-98-6    | >= 10 - < 30 * |
|-----------------------------|--------------------------|------------|----------------|
| Butane                      | Butyl hydride            | 106-97-8   | >= 10 - < 30 * |
| n-Butyl acetate             | Acetic acid, butyl ester | 123-86-4   | >= 10 - < 30 * |
| Hydrocarbons, C9, aromatics | No data availa-<br>ble   | 64742-95-6 | >= 10 - < 30 * |
| Aluminium                   | No data availa-<br>ble   | 7429-90-5  | >= 5 - < 10 *  |

<sup>\*</sup> Actual concentration or concentration range is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Get medical attention if symptoms occur.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms

and effects, both acute and

delayed

Gas reduces oxygen available for breathing.

Prolonged or repeated contact may dry skin and cause irrita-

tion.

Causes serious eye irritation. May cause drowsiness or dizziness.

May displace oxygen and cause rapid suffocation.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Flash back possible over considerable distance.

Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health. If the temperature rises there is danger of the vessels bursting

due to the high vapor pressure.

Hazardous combustion prod: :

ucts

Carbon oxides Metal oxides

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment:

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

Evacuate personnel to safe areas. Remove all sources of ignition.

Ventilate the area.

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapors/mists with a water spray

iet.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items em-

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

ployed in the cleanup of releases. You will need to determine

which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

**SECTION 7. HANDLING AND STORAGE** 

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventila-

tion.

Advice on safe handling : Do not get on skin or clothing.

Avoid breathing spray.

Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the

environment.

Do not spray on an open flame or other ignition source.

Conditions for safe storage : Store locked up.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Do not pierce or burn, even after use. Keep cool. Protect from sunlight.

Materials to avoid : Do not store with the following product types:

Self-reactive substances and mixtures

Organic peroxides Oxidizing agents Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit

flammable gases

Explosives Gases

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### Ingredients with workplace control parameters

| Components                  | CAS-No.    | Value type<br>(Form of<br>exposure)    | Control parameters / Permissible concentration | Basis     |
|-----------------------------|------------|--|--|-----------|
| Acetone                     | 67-64-1    | TWA 500 ppm<br>1,200 mg/m <sup>3</sup> |  | CA AB OEL |
|                             |            | STEL                                   | 750 ppm<br>1,800 mg/m <sup>3</sup>             | CA AB OEL |
|                             |            | TWA                                    | 250 ppm  | CA BC OEL |
|                             |            | STEL                                   | 500 ppm  | CA BC OEL |
|                             |            | TWAEV                                  | 250 ppm  | CA QC OEL |
|                             |            | STEV                                   | 500 ppm  | CA QC OEL |
|                             |            | TWA                                    | 250 ppm  | ACGIH     |
|                             |            | STEL                                   | 500 ppm  | ACGIH     |
| Propane                     | 74-98-6    | TWA                                    | 1,000 ppm                                      | CA AB OEL |
| ··opane                     |            | TWAEV                                  | 1,000 ppm<br>1,800 mg/m <sup>3</sup>           | CA QC OEL |
| Butane                      | 106-97-8   | TWA                                    | 1,000 ppm                                      | CA AB OEL |
|                             |            | TWAEV                                  | 800 ppm<br>1,900 mg/m <sup>3</sup>             | CA QC OEL |
|                             |            | STEL                                   | 1,000 ppm                                      | CA BC OEL |
|                             |            | STEL                                   | 1,000 ppm                                      | ACGIH     |
| n-Butyl acetate             | 123-86-4   | STEL                                   | 200 ppm<br>950 mg/m <sup>3</sup>               | CA AB OEL |
|                             |            | TWA                                    | 150 ppm<br>713 mg/m <sup>3</sup>               | CA AB OEL |
|                             |            | TWAEV                                  | 50 ppm   | CA QC OEL |
|                             |            | STEV                                   | 150 ppm  | CA QC OEL |
|                             |            | TWA                                    | 50 ppm   | CA BC OEL |
|                             |            | STEL                                   | 150 ppm  | CA BC OEL |
|                             |            | TWA                                    | 50 ppm   | ACGIH     |
|                             |            | STEL                                   | 150 ppm  | ACGIH     |
| Hydrocarbons, C9, aromatics | 64742-95-6 | TWA                                    | 200 mg/m³<br>(total hydrocarbon<br>vapor)      | CA AB OEL |
|                             |            | TWAEV                                  | 200 mg/m <sup>3</sup>                          | CA QC OEL |
| Aluminium                   | 7429-90-5  | TWA (Dust)                             | 10 mg/m³                                       | CA AB OEL |
|                             |            | TWA (Respirable)                       | 1 mg/m³<br>(Aluminum)                          | CA BC OEL |
|                             |            | TWA (pow-<br>der)                      | 5 mg/m³<br>(Aluminum)                          | CA AB OEL |
|                             |            | TWAEV<br>(respirable<br>dust)          | 5 mg/m³  | CA QC OEL |
|                             |            | TWA (Respirable particulate matter)    | 1 mg/m³<br>(Aluminum)                          | ACGIH     |

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

### **Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sam-<br>pling  | Permissible concentra- | Basis        |
|------------|---------|--------------------|---------------------|--|------------------------|--------------|
|            |         |                    |                     | time   | tion                   |              |
| Acetone    | 67-64-1 | Acetone            | Urine               | End of<br>shift (As<br>soon as<br>possible<br>after<br>exposure<br>ceases) | 25 mg/l                | ACGIH<br>BEI |

**Engineering measures** : Minimize workplace exposure concentrations.

If sufficient ventilation is unavailable, use with local exhaust

ventilation.

If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust venti-

lation.

Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the re-

commended guidelines, use respiratory protection.

Filter type : Self-contained breathing apparatus

Hand protection

Material : butyl-rubber
Break through time : > 480 min
Glove thickness : 0.7 mm

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of

workday.

Eye protection : Wear the following personal protective equipment:

Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Wear the following personal protective equipment:

If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic

protective clothing.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures : If exposure to chemical is likely during typical use, provide

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

eye flushing systems and safety showers close to the wor-

king place.

When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : aerosol

Propellant : Propane, Butane

Color : silver, gray

Odor : characteristic

Odor Threshold : No data available

pH : Solvent mixture; pH value determination not possible, no

aqueous solution

Melting point/freezing point : No data available

Initial boiling point and boiling

range

Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit / Upper

flammability limit

13.0 %(V)

Lower explosion limit / Lower

flammability limit

0.7 %(V)

Vapor pressure : Not applicable

Relative vapor density : Not applicable

Relative density : No data available

Solubility(ies)

Water solubility : immiscible

Partition coefficient: n- : Not applicable

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

octanol/water

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics

Particle size : Not applicable

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Extremely flammable aerosol.

Vapors may form explosive mixture with air.

If the temperature rises there is danger of the vessels bursting

due to the high vapor pressure.

Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

No hazardous decomposition products are known.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: 5.1 06/22/2024

SDS Number: 10709972-00014

Date of last issue: 10/18/2023 Date of first issue: 12/15/2010

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

**Components:** 

Acetone:

Acute oral toxicity : LD50 (Rat): 5,800 mg/kg

Acute inhalation toxicity : LC50 (Rat): 76 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): 7,426 mg/kg

Propane:

Acute inhalation toxicity : LC50 (Rat): > 800000 ppm

Exposure time: 15 min Test atmosphere: gas

**Butane:** 

Acute inhalation toxicity : LC50 (Rat): 658 mg/l

Exposure time: 4 h
Test atmosphere: vapor

n-Butyl acetate:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 21.1 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Hydrocarbons, C9, aromatics:

Acute oral toxicity : LD50 (Rat, female): 3,492 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 6.193 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

**Aluminium:** 

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Method: OECD Test Guideline 401

Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 0.888 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

#### Skin corrosion/irritation

Not classified based on available information.

### **Components:**

Acetone:

Assessment : Repeated exposure may cause skin dryness or cracking.

n-Butyl acetate:

Species : Rabbit

Result : No skin irritation

Assessment : Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C9, aromatics:

Assessment : Repeated exposure may cause skin dryness or cracking.

**Aluminium:** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Based on data from similar materials

### Serious eye damage/eye irritation

Causes serious eye irritation.

### **Components:**

Acetone:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Method : OECD Test Guideline 405

n-Butyl acetate:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Hydrocarbons, C9, aromatics:

Species : Rabbit

Result : No eye irritation

**Aluminium:** 

Species : Rabbit

Result : No eye irritation

Remarks : Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

**Components:** 

Acetone:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

n-Butyl acetate:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

Hydrocarbons, C9, aromatics:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Aluminium:

Routes of exposure : Skin contact Species : Guinea pig Result : negative

Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:

Acetone:

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

**Application Route: Ingestion** 

Result: negative

Propane:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay)

Species: Rat

Application Route: inhalation (gas) Method: OECD Test Guideline 474

Result: negative

**Butane:** 

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Rat

Application Route: inhalation (gas) Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

n-Butyl acetate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Hydrocarbons, C9, aromatics:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Rat

Application Route: inhalation (vapor)

Result: negative

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Aluminium:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

**Components:** 

Acetone:

Species : Mouse
Application Route : Skin contact
Exposure time : 424 days
Result : negative

Aluminium:

Species : Rat

Application Route : inhalation (dust/mist/fume)

Exposure time : 86 weeks Result : negative

Reproductive toxicity

Not classified based on available information.

Components:

Acetone:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Propane:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: inhalation (gas)

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: inhalation (gas) Method: OECD Test Guideline 422

Result: negative

**Butane:** 

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: inhalation (gas) Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Application Route: inhalation (gas) Method: OECD Test Guideline 422

Result: negative

n-Butyl acetate:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor) Method: OECD Test Guideline 416

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Hydrocarbons, C9, aromatics:

Effects on fertility : Test Type: Three-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Mouse

Application Route: inhalation (vapor)

Result: negative

**Aluminium:** 

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Application Route: Ingestion

Method: OECD Test Guideline 422

Result: negative

Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development

Species: Mouse

Application Route: Ingestion

Result: negative

#### STOT-single exposure

May cause drowsiness or dizziness.

May displace oxygen and cause rapid suffocation.

#### Components:

Acetone:

Assessment : May cause drowsiness or dizziness.

Propane:

Assessment : May cause drowsiness or dizziness.

**Butane:** 

Assessment : May cause drowsiness or dizziness.

n-Butyl acetate:

Assessment : May cause drowsiness or dizziness.

Hydrocarbons, C9, aromatics:

Assessment : May cause drowsiness or dizziness.

Assessment : May cause respiratory irritation.

### STOT-repeated exposure

Not classified based on available information.

#### Repeated dose toxicity

#### Components:

### Acetone:

Species : Rat

NOAEL : 900 mg/kg LOAEL : 1,700 mg/kg Application Route : Ingestion Exposure time : 90 Days

Species : Rat NOAEL : 45 mg/l

Application Route : inhalation (vapor)

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Exposure time 8 Weeks

Propane:

**Species** Rat NOAEL 7.214 mg/l Application Route : inhalation (gas)

Exposure time : 6 Weeks

Method : OECD Test Guideline 422

**Butane:** 

**Species** Rat **NOAEL** 9000 ppm Application Route inhalation (gas) : 6 Weeks Exposure time

Method : OECD Test Guideline 422

n-Butyl acetate:

**Species** Rat **NOAEL** 2.4 mg/l

Application Route inhalation (vapor)

Exposure time 90 Days

Hydrocarbons, C9, aromatics:

**Species** Rat, female NOAEL 900 mg/m<sup>3</sup> Application Route inhalation (vapor)

Exposure time 12 Months

Remarks Based on data from similar materials

### **Aspiration toxicity**

Not classified based on available information.

#### Components:

#### Acetone:

The substance or mixture causes concern owing to the assumption that it causes a human aspiration toxicity hazard.

#### Hydrocarbons, C9, aromatics:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

#### Components:

#### Acetone:

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,540 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia pulex (Water flea)): 8,800 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): 7,000

mg/l

Exposure time: 96 h

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): >= 79 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50: 61,150 mg/l

Exposure time: 30 min Method: ISO 8192

n-Butyl acetate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 18 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia sp. (Water flea)): 44 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 397

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOEC (Pseudokirchneriella subcapitata (green algae)): 196

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 23.2 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Toxicity to microorganisms : IC50 (Tetrahymena pyriformis): 356 mg/l

Exposure time: 40 h

Hydrocarbons, C9, aromatics:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 203

Toxicity to daphnia and other : EL50 (Daphnia magna (Water flea)): 3.2 mg/l

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

aquatic invertebrates Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 7.9

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)): 0.22

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: > 99 mg/l

Exposure time: 10 min

**Aluminium:** 

Toxicity to fish : NOEC (Salmo trutta (brown trout)): > 80 μg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

NOEC (Daphnia magna (Water flea)): > 0.135 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : No toxicity at the limit of solubility.

### Persistence and degradability

#### **Components:**

Acetone:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 91 % Exposure time: 28 d

Propane:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 100 % Exposure time: 385.5 h

Remarks: Based on data from similar materials

**Butane:** 

Biodegradability : Result: Readily biodegradable.

Biodegradation: 100 % Exposure time: 385.5 h

Remarks: Based on data from similar materials

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

n-Butyl acetate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 83 % Exposure time: 28 d

Method: OECD Test Guideline 301D

Hydrocarbons, C9, aromatics:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 78 % Exposure time: 28 d

Method: OECD Test Guideline 301F

**Bioaccumulative potential** 

**Components:** 

Acetone:

Partition coefficient: n-

octanol/water

log Pow: -0.27 - -0.23

**Butane:** 

Partition coefficient: n-

octanol/water

log Pow: 2.31

n-Butyl acetate:

Partition coefficient: n-

octanol/water

log Pow: 2.3

Hydrocarbons, C9, aromatics:

Partition coefficient: n-

octanol/water

log Pow: 3.7 - 4.5

Mobility in soil

No data available

Other adverse effects

No data available

**SECTION 13. DISPOSAL CONSIDERATIONS** 

**Disposal methods** 

Waste from residues : Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty containers retain residue and can be dangerous.

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product. Please ensure aerosol cans are sprayed completely empty

(including propellant)

#### **SECTION 14. TRANSPORT INFORMATION**

### International Regulations

**UNRTDG** 

UN number : UN 1950 Proper shipping name : AEROSOLS

Class : 2.1

Packing group : Not assigned by regulation

Labels : 2.1 Environmentally hazardous : no

**IATA-DGR** 

UN/ID No. : UN 1950

Proper shipping name : Aerosols, flammable

Class : 2.

Packing group : Not assigned by regulation

Labels : Flammable Gas

Packing instruction (cargo : 203

aircraft)

Packing instruction (passen: 203

ger aircraft)

**IMDG-Code** 

UN number : UN 1950
Proper shipping name : AEROSOLS

Class : 2.1

Packing group : Not assigned by regulation

Labels : 2.1
EmS Code : F-D, S-U
Marine pollutant : no

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

Not applicable for product as supplied.

**Domestic regulation** 

**TDG** 

UN number : UN 1950
Proper shipping name : AEROSOLS

Class : 2.1

Packing group : Not assigned by regulation

Labels : 2.1 ERG Code : 126 Marine pollutant : no

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### **SECTION 15. REGULATORY INFORMATION**

### The ingredients of this product are reported in the following inventories:

DSL : All chemical substances in this product comply with the CEPA

1999 and NSNR and are on or exempt from listing on the

Canadian Domestic Substances List (DSL).

#### **SECTION 16. OTHER INFORMATION**

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

CA AB OEL / TWA : 8-hour Occupational exposure limit
CA AB OEL / STEL : 15-minute occupational exposure limit

CA BC OEL / TWA : 8-hour time weighted average CA BC OEL / STEL : short-term exposure limit

CA QC OEL / TWAEV : Time-weighted average exposure value

CA QC OEL / STEV : Short-term exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan): ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect

according to the Hazardous Products Regulations



# PERFECT SILVER SPRAY, 270 g

Version Revision Date: SDS Number: Date of last issue: 10/18/2023 5.1 06/22/2024 10709972-00014 Date of first issue: 12/15/2010

Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety

Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Revision Date : 06/22/2024 Date format : mm/dd/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8