

SAFETY DATA SHEET

GALMET SPRAYPAINT AEROSOL SILVER

Infosafe No.: HXOM0
ISSUED Date : 27/06/2017
ISSUED by: ITW POLYMERS AND FLUIDS

1. IDENTIFICATION

GHS Product Identifier

GALMET SPRAYPAINT AEROSOL SILVER

Company Name

ITW POLYMERS AND FLUIDS (ABN 63 004 235 063)

Address

100 Hassall Street Wetherill Park
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Telephone/Fax Number

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Emergency phone number

1800 385 556 / 0438 465 960

Emergency Contact Name

(02) 9652-1713 A/HRS

Recommended use of the chemical and restrictions on use

Application is by spray atomisation from a hand held aerosol pack

Use according to manufacturer's directions.

Aerosol spray paint.

Additional Information

Website: www.itwpcf.com.au

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Acute Toxicity - Oral: Category 4

Eye Damage/Irritation: Category 2A

Flammable Aerosol: Category 1

Gases under Pressure: Compressed Gas

Hazardous to the Aquatic Environment - Acute Hazard: Category 3

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 3

Skin Corrosion/Irritation: Category 2

STOT Repeated Exposure: Category 2

STOT Single Exposure: Category 3 (narcotic)

Toxic to Reproduction: Category 2

Signal Word (s)

DANGER

Hazard Statement (s)

AUH044 Risk of explosion if heated under confinement.

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement (s)

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read label before use.

Pictogram (s)

Flame, Gas cylinder, Exclamation mark, Health hazard



Precautionary statement – Prevention

P201 Obtain special instructions before use.

Precautionary statement – Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.

Precautionary statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P410+P403 Protect from sunlight. Store in a well-ventilated place.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Precautionary statement – Disposal

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

Other Information

Classification of the substance or mixture:
 HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

GHS Classification [1]: Aerosols Category 1, Gas under Pressure (Compressed gas), Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Reproductive Toxicity Category 2, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Specific target organ toxicity - repeated exposure Category 2, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3

Legend: 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
TOLUENE	108-88-3	10-<30 %
Naphtha petroleum, light aromatic solvent	64742-95-6.	0-<10 %
n-Butyl acetate	123-86-4	0-<10 %
Aluminium powder coated	7429-90-5	not spec
Dimethyl ether	115-10-6	30-<60 %

Other Information

Synonyms: Not Available

Substances:

See section below for composition of Mixtures

4. FIRST-AID MEASURES

Inhalation

If aerosols, fumes or combustion products are inhaled:

Remove to fresh air.

Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor.

Ingestion

Avoid giving milk or oils.

Avoid giving alcohol.

Not considered a normal route of entry.

If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Skin

If solids or aerosol mists are deposited upon the skin:

Flush skin and hair with running water (and soap if available).

Remove any adhering solids with industrial skin cleansing cream.

DO NOT use solvents.

Seek medical attention in the event of irritation.

Eye contact

If aerosols come in contact with the eyes:

Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Transport to hospital or doctor without delay.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Indication of immediate medical attention and special treatment needed if necessary

Treat symptomatically.

For lower alkyl ethers:

BASIC TREATMENT:

Establish a patent airway with suction where necessary.

Watch for signs of respiratory insufficiency and assist ventilation as necessary.

Administer oxygen by non-rebreather mask at 10 to 15 l/min.

A low-stimulus environment must be maintained.

Monitor and treat, where necessary, for shock.

Anticipate and treat, where necessary, for seizures.

DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

ADVANCED TREATMENT:

Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.

Positive-pressure ventilation using a bag-valve mask might be of use.

Monitor and treat, where necessary, for arrhythmias.

Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.

Drug therapy should be considered for pulmonary oedema.

Hypotension without signs of hypovolaemia may require vasopressors.

Treat seizures with diazepam.

Proparacaine hydrochloride should be used to assist eye irrigation.

EMERGENCY DEPARTMENT:

Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum

aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.

Ethers may produce anion gap acidosis. Hyperventilation and bicarbonate therapy might be indicated.

Haemodialysis might be considered in patients with impaired renal function.

Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

Following acute or short term repeated exposures to toluene:

Toluene is absorbed across the alveolar barrier, the blood/air mixture being 11.2/15.6 (at 37 °C.) The concentration of toluene, in expired breath, is of the order of 18 ppm following sustained exposure to 100 ppm. The tissue/blood proportion is 1/3 except in adipose where the proportion is 8/10.

Metabolism by microsomal mono-oxygenation, results in the production of hippuric acid. This may be detected in the urine in amounts between 0.5 and 2.5 g/24 hr which represents, on average 0.8 gm/gm of creatinine. The biological half-life of hippuric acid is in the order of 1-2 hours.

Primary threat to life from ingestion and/or inhalation is respiratory failure.

Patients should be quickly evaluated for signs of respiratory distress (eg cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen.

Patients with inadequate tidal volumes or poor arterial blood gases ($pO_2 < 50$ mm Hg or $pCO_2 > 50$ mm Hg) should be intubated.

Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial damage has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.

A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.

Epinephrine (adrenaline) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

Lavage is indicated in patients who require decontamination; ensure use.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant / Index / Sampling Time / Comments

o-Cresol in urine 0.5 mg/L End of shift B

Hippuric acid in urine 1.6 g/g creatinine End of shift B, NS

Toluene in blood 0.05 mg/L Prior to last shift of workweek

NS: Non-specific determinant; also observed after exposure to other material

B: Background levels occur in specimens collected from subjects NOT exposed

5. FIRE-FIGHTING MEASURES

Specific Methods

Alert Fire Brigade and tell them location and nature of hazard.

May be violently or explosively reactive.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water course.

Specific Hazards Arising From The Chemical

Fire Incompatibility: Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire/Explosion Hazard:

Liquid and vapour are highly flammable.

Severe fire hazard when exposed to heat or flame.

Vapour forms an explosive mixture with air.

Severe explosion hazard, in the form of vapour, when exposed to flame or spark.

Combustion products include:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

Hazchem Code

2Y

Decomposition Temperature

Not Available

Extinguishing Media - Small Fires

Water spray, dry chemical or CO2

Extinguishing Media - Large Fires

Water spray or fog.

6. ACCIDENTAL RELEASE MEASURES

Clean-up Methods - Small Spillages

Slippery when spilt.

Clean up all spills immediately.

Avoid contact with skin and eyes.

Wear impervious gloves and safety goggles.

Trowel up/scrape up.

Clean up all spills immediately.

Avoid breathing vapours/ aerosols/ or dusts and avoid contact with skin and eyes.

Control personal contact with the substance, by using protective equipment.

Contain and absorb spill with sand, earth, inert material or vermiculite.

Clean-up Methods - Large Spillages

After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve.

Clear area of personnel and move upwind.

Alert Fire Brigade and tell them location and nature of hazard.

May be violently or explosively reactive.

Wear breathing apparatus plus protective gloves.

Remove leaking cylinders to a safe place if possible.

Release pressure under safe, controlled conditions by opening the valve.

Other Information

Personal Protective Equipment advice is contained in Section 8 - Exposure controls/personal protection of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Safe handling:

DO NOT allow clothing wet with material to stay in contact with skin

Avoid all personal contact, including inhalation.

Wear protective clothing when risk of exposure occurs.

Use in a well-ventilated area.

Prevent concentration in hollows and sumps.

Other information:

Store in original containers.

Store in an upright position.

DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

No smoking, naked lights, heat or ignition sources.

Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can Store in original containers in approved flammable liquid storage area.

DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

No smoking, naked lights, heat or ignition sources.

Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container:

Aerosol dispenser.
Check that containers are clearly labelled..

Storage incompatibility:
Avoid reaction with oxidising agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

INGREDIENT DATA

Source / Ingredient / Material name / TWA / STEL / Peak / Notes

Australia Exposure Standards toluene Toluene 191 mg/m³ / 50 ppm 574 mg/m³ / 150 ppm Not Available Not Available

Australia Exposure Standards n-butyl acetate n-Butyl acetate 713 mg/m³ / 150 ppm 950 mg/m³ / 200 ppm Not Available Not Available

Australia Exposure Standards aluminium powder coated Aluminium, pyro powders (as Al) 5 mg/m³ Not Available Not Available Not Available

Australia Exposure Standards aluminium powder coated Aluminium (metal dust) 10 mg/m³ Not Available Not Available Not Available
Australia Exposure Standards aluminium powder coated Aluminium (welding fumes) (as Al) 5 mg/m³ Not Available Not Available

Australia Exposure Standards dimethyl ether Dimethyl ether 760 mg/m³ / 400 ppm 950 mg/m³ / 500 ppm Not Available Not Available

EMERGENCY LIMITS

Ingredient / Material name / TEEL-1 / TEEL-2 / TEEL-3

toluene Toluene Not Available Not Available Not Available

n-butyl acetate Butyl acetate, n- Not Available Not Available Not Available

dimethyl ether Methyl ether; (Dimethyl ether) 3,000 ppm 3800 ppm 7200 ppm

Ingredient / Original IDLH / Revised IDLH

toluene 2,000 ppm 500 ppm

naphtha petroleum, light aromatic solvent Not Available Not Available

n-butyl acetate 10,000 ppm 1,700 [LEL] ppm

aluminium powder coated Not Available Not Available

dimethyl ether Not Available Not Available

Appropriate Engineering Controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment.

Respiratory Protection

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Eye Protection

Safety glasses with side shields.

Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Hand Protection

No special equipment needed when handling small quantities.

OTHERWISE:

For potentially moderate exposures:

Wear general protective gloves, eg. light weight rubber gloves.

For potentially heavy exposures:

Wear chemical protective gloves, eg. PVC. and safety footwear.

Personal Protective Equipment

Other protection:

No special equipment needed when handling small quantities.

OTHERWISE:

Overalls.

Skin cleansing cream.

Eyewash unit.

The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton.

Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.

BREThERICK: Handbook of Reactive Chemical Hazards.

Thermal Hazards

Not Available

Body Protection

See Hand protection below

See Other protection below

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Aerosol - Liquid

Appearance

Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable ether propellant.

[Silver liquid with a strong solvent odour; does not mix with water.

Odour

Not Available

Decomposition Temperature

Not Available

Solubility in Water

Immiscible

pH

Not Applicable (as supplied)

Not Applicable as a solution(1%)

Vapour Pressure

Under Pressure

Vapour Density (Air=1)

>1

Evaporation Rate

Not Available

Odour Threshold

Not Available

Viscosity

Not Available

Volatile Component

Not Available

Partition Coefficient: n-octanol/water

Not Available

Surface tension

Not Available

Flash Point

4 °C (toluene)

Flammability

HIGHLY FLAMMABLE.

Auto-Ignition Temperature

Not Available

Explosion Limit - Upper

Not Available

Explosion Limit - Lower

Not Available

Explosion Properties

Not Available

Molecular Weight

Not Available

Oxidising Properties

Not Available

Initial boiling point and boiling range

111 °C (IBP)

Relative density

>1 (liquid) (Water = 1)

Melting/Freezing Point

Not Available

Other Information

Taste: Not Available

Gas group: Not Available

VOC g/L: Not Available

10. STABILITY AND REACTIVITY

Reactivity

See section 7 - Handling and storage

Chemical Stability

Elevated temperatures.

Presence of open flame.

Product is considered stable.

Hazardous polymerisation will not occur.

Conditions to Avoid

See section 7 - Handling and storage

Incompatible materials

See section 7 - Handling and storage

Hazardous Decomposition Products

See section 5 - Fire-fighting measures

Possibility of hazardous reactions

See section 7 - Handling and storage

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Galmet Spraypaint Aerosol Silver

TOXICITY: Not Available

IRRITATION: Not Available

Toluene

TOXICITY:

Dermal (rabbit) LD50: 12124 mg/kg[2]
Inhalation (rat) LC50: 49 mg/L/4H[2]
Oral (rat) LD50: 636 mg/kg[2]
IRRITATION:
Eye (rabbit): 2mg/24h - SEVERE
Eye (rabbit):0.87 mg - mild
Eye (rabbit):100 mg/30sec - mild
Skin (rabbit):20 mg/24h-moderate
Skin (rabbit):500 mg - moderate

naphtha petroleum, light aromatic solvent

TOXICITY:
Dermal (rabbit) LD50: >1900 mg/kg[1]
Inhalation (rat) LC50: >7323.25967580654 mg/L/8h*[2]
Oral (rat) LD50: >4500 mg/kg[1]
IRRITATION: Not Available

n-butyl acetate

TOXICITY:
Dermal (rabbit) LD50: 3200 mg/kg[2]
Inhalation (rat) LC50: 1.802 mg/l4 h[1]
Oral (rat) LD50: 10768 mg/kg[2]
IRRITATION:
Eye (human): 300 mg
Eye (rabbit): 20 mg (open)-SEVERE
Eye (rabbit): 20 mg/24h - moderate
Skin (rabbit): 500 mg/24h-moderate

aluminium powder coated

TOXICITY:
Oral (rat) LD50: >2000 mg/kg[1]
IRRITATION: Not Available

Dimethyl ether

TOXICITY:
Inhalation (rat) LC50: 309 mg/L/4H[2]
IRRITATION: Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS.
Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT:

For trimethylbenzenes:

Absorption of 1,2,4-trimethylbenzene occurs after exposure by swallowing, inhalation, or skin contact. In the workplace, inhalation and skin contact are the most important routes of absorption; whole-body toxic effects from skin absorption are unlikely to occur as the skin irritation caused by the chemical generally leads to quick removal. The substance is fat-soluble and may accumulate in fatty tissues. It is also bound to red blood cells in the bloodstream.

For C9 aromatics (typically trimethylbenzenes – TMBs)

Acute toxicity: Animal testing shows that semi-lethal concentrations and doses vary amongst this group. The semilethal concentrations for inhalation range from 6000 to 10000 mg/cubic metre for C9 aromatic naphtha and 18000-24000 mg/cubic metre for 1,2,4- and 1,3,5-TMB, respectively.

Irritation and sensitization: Results from animal testing indicate that C9 aromatic hydrocarbon solvents are mildly to moderately irritating to the skin, minimally irritating to the eye, and have the potential to irritate the airway and cause depression of breathing rate. There is no evidence that it sensitizes skin.

Inhalation (rat) TCLo: 1320 ppm/6h/90D-I * [Devoe]

N-BUTYL ACETATE:

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

ALUMINIUM POWDER COATED:

No significant acute toxicological data identified in literature search.

Galmet Spraypaint Aerosol Silver & TOLUENE & N-BUTYL ACETATE:

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Galmet Spraypaint Aerosol Silver & TOLUENE:

For toluene:

Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous system depression, and in large doses has a narcotic effect. 60mL has caused death. Death of heart muscle fibres, liver swelling, congestion and bleeding of the lungs and kidney injury were all found on autopsy.

Acute Toxicity: Data available to make classification

Ingestion

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Not normally a hazard due to physical form of product.

Considered an unlikely route of entry in commercial/industrial environments

Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed.

Inhalation

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation of toxic gases may cause:

Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures;

respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest;

heart: collapse, irregular heartbeats and cardiac arrest;

gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain.

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.

Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and, finally, convulsions, coma and death.

WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

Inhalational exposure to diethyl ether may cause immediate unconsciousness, inco-ordination, blurring of vision, headache, dizziness and death depending on dose and extent of exposure. It is a weak heart sensitiser in dogs.

Skin

The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time.

Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

Though considered non-harmful, slight irritation may result from contact because of the abrasive nature of the aluminium oxide particles. Thus it may cause itching and skin reaction and inflammation.

Spray mist may produce discomfort

Alkyl ethers may defat and dehydrate the skin producing dermatoses. Absorption may produce headache, dizziness, and central nervous system depression.

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Eye

Not considered to be a risk because of the extreme volatility of the gas. Eye contact with alkyl ethers (vapour or liquid) may produce irritation, redness and tears.

The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.

Skin corrosion/irritation

Data available to make classification

Serious eye damage/irritation

Data available to make classification

Mutagenicity

Data Not Available to make classification

Respiratory sensitisation

Data Not Available to make classification

Carcinogenicity

Data Not Available to make classification

Reproductive Toxicity

Data available to make classification

STOT-single exposure

Data available to make classification

STOT-repeated exposure

Data available to make classification

Aspiration Hazard

Data Not Available to make classification

Chronic Effects

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.

Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Animal testing shows long term exposure to aluminium oxides may cause lung disease and cancer, depending on the size of the particle. The smaller the size, the greater the tendencies of causing harm.

Main route of exposure to the gas in the workplace is by inhalation.

Chronic exposure to alkyl ethers may result in loss of appetite, excessive thirst, fatigue, and weight loss.

Intentional abuse (glue sniffing) or occupational exposure to toluene can result in chronic habituation. Chronic abuse has caused inco-ordination, tremors of the extremities (due to widespread cerebrum withering), headache, abnormal speech, temporary memory loss, convulsions, coma, drowsiness, reduced colour perception, blindness, nystagmus (rapid, involuntary eye movements), hearing loss leading to deafness and mild dementia.

12. ECOLOGICAL INFORMATION

Ecotoxicity

NOT AVAILABLE

Ingredient / Endpoint / Test Duration (hr) / Effect / Value / Species / BCF

Galmet Spraypaint Aerosol Silver Not Available Not Available Not Available Not Available Not Available Not Available

toluene Not Available Not Available Not Available Not Available Not Available Not Available

naphtha petroleum, light aromatic solvent Not Available Not Available Not Available Not Available Not Available Not Available

n-butyl acetate Not Available Not Available Not Available Not Available Not Available Not Available

aluminium powder coated Not Available Not Available Not Available Not Available Not Available Not Available

dimethyl ether Not Available Not Available Not Available Not Available Not Available Not Available

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus.

Most ethers are very resistant to hydrolysis, and the rate of cleavage of the carbon-oxygen bond by abiotic processes is expected to be insignificant.

Direct photolysis will not be an important removal process since aliphatic ethers do not absorb light at wavelengths >290 nm

For Toluene:

log Kow : 2.1-3;

log Koc : 1.12-2.85;

Koc : 37-260;

log Kom : 1.39-2.89;

Half-life (hr) air : 2.4-104;

Half-life (hr) H₂O surface water : 5.55-528;

Half-life (hr) H₂O ground : 168-2628;

Half-life (hr) soil : <48-240;

Henry's Pa m³ /mol : 518-694;

Henry's atm m³ /mol : 5.94;

E-03BOD 5 0.86-2.12, 5%COD - 0.7-2.52, 21-27%;

ThOD - 3.13 ; BCF - 1.67-380;

log BCF - 0.22-3.28.

Atmospheric Fate: The majority of toluene evaporates to the atmosphere from the water and soil. The main degradation pathway for toluene in the atmosphere is reaction with photochemically produced hydroxyl radicals. The estimated atmospheric half life for toluene is about 13 hours.

DO NOT discharge into sewer or waterways.

For n-Butyl Acetate:

Koc: ~200;

log Kow: 1.78;

Half-life (hr) air: 144;

Half-life (hr) H₂O surface water: 178 - 27156;

Henry's atm: m³ /mol: 3.20E-04

BOD 5 if unstated: 0.15-1.02, 7%;

COD: 78%;

ThOD: 2.207;

BCF : 4-14.

Environmental Fate: Terrestrial Fate - Butyl acetate is expected to have moderate mobility in soil. Volatilization of n-butyl acetate is expected from moist and dry soil surfaces. n-Butyl acetate may biodegrade in soil.

Persistence and degradability

Ingredient / Persistence: Water/Soil / Persistence: Air
toluene LOW (Half-life = 28 days) LOW (Half-life = 4.33 days)
n-butyl acetate LOW LOW
dimethyl ether LOW LOW

Mobility

Mobility in soil:

Ingredient / Mobility

toluene LOW (KOC = 268)

n-butyl acetate LOW (KOC = 20.86)

dimethyl ether HIGH (KOC = 1.292)

Bioaccumulative Potential

Ingredient / Bioaccumulation

toluene LOW (BCF = 90)

n-butyl acetate LOW (BCF = 14)

dimethyl ether LOW (LogKOW = 0.1)

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

Reduction

Reuse

Recycling

Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

DO NOT allow wash water from cleaning or process equipment to enter drains.

It may be necessary to collect all wash water for treatment before disposal.

In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

Where in doubt contact the responsible authority.

Consult State Land Waste Management Authority for disposal.

Discharge contents of damaged aerosol cans at an approved site.

Allow small quantities to evaporate.

DO NOT incinerate or puncture aerosol cans.

14. TRANSPORT INFORMATION

Transport Information

Land transport (ADG)

UN number: 1950

Packing group: Not Applicable

UN proper shipping name: AEROSOLS

Environmental hazard: No relevant data

Transport hazard class(es)

Class: 2.1

Subrisk: Not Applicable

Special precautions for user

Special provisions: 63 190 277 327 344

Limited quantity: 1000ml

Air transport (ICAO-IATA / DGR)

UN number: 1950

Packing group: Not Applicable

UN proper shipping name: Aerosols, flammable; Aerosols, flammable (engine starting fluid)

Environmental hazard: No relevant data

Transport hazard class(es)

ICAO/IATA Class: 2.1

ICAO / IATA Subrisk: Not Applicable
ERG Code: 10L
Special precautions for user
Special provisions: A145 A167 A802; A1 A145 A167 A802
Cargo Only Packing Instructions: 203
Cargo Only Maximum Qty / Pack: 150 kg
Passenger and Cargo Packing Instructions: 203; Forbidden
Passenger and Cargo Maximum Qty / Pack: 75 kg; Forbidden
Passenger and Cargo Limited Quantity Packing Instructions: Y203; Forbidden
Passenger and Cargo Limited Maximum Qty / Pack: 30 kg G; Forbidden

Sea transport (IMDG-Code / GGVSee)
UN number: 1950
Packing group: Not Applicable
UN proper shipping name: AEROSOLS
Environmental hazard: Not Applicable
Transport hazard class(es)
IMDG Class: 2.1
IMDG Subrisk: Not Applicable
Special precautions for user
EMS Number: F-D, S-U
Special provisions: 63 190 277 327 344 381 959
Limited Quantities: 1000ml

Transport in bulk according to Annex II of MARPOL and the IBC code:
Galmet Spraypaint Aerosol Silver

U.N. Number

1950

UN proper shipping name

AEROSOLS

Transport hazard class(es)

2.1

Hazchem Code

2Y

IERG Number

49

Marine Pollutant

NO

15. REGULATORY INFORMATION

Regulatory information

TOLUENE(108-88-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS:

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT(64742-95-6.) IS FOUND ON THE FOLLOWING REGULATORY LISTS:

Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

N-BUTYL ACETATE(123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS:

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

ALUMINIUM POWDER COATED(7429-90-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS:

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

DIMETHYL ETHER(115-10-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS:

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

National / Inventory Status

Australia - AICS Y
Canada - DSL Y
Canada - NDSL N (toluene; aluminium powder coated; n-butyl acetate; dimethyl ether; naphtha petroleum, light aromatic solvent)
China - IECSC Y
Europe - EINEC / ELINCS / NLP Y
Japan - ENCS N (aluminium powder coated)
Korea - KECI Y
New Zealand - NZIoC Y
Philippines - PICCS Y
USA - TSCA Y

Legend:

Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

Poisons Schedule

N/A

16. OTHER INFORMATION

Other Information

Version No: 5.1.1.1
Safety Data Sheet according to WHS and ADG requirements

S.GHS.AUS.EN

Ingredients with multiple cas numbers

Name / CAS No

naphtha petroleum, light aromatic solvent 64742-95-6., 25550-14-5.

dimethyl ether 115-10-6, 157621-61-9

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS

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