SAFETY DATA SHEET

GALMET SPRAYPAINT AEROSOL SILVER

Infosafe No.: HXOM0 ISSUED Date : 23/12/2022 ISSUED by: ITW POLYMERS & FLUIDS

Section 1 - Identification

Product Identifier GALMET SPRAYPAINT AEROSOL SILVER

Company Name ITW POLYMERS & FLUIDS

Address 100 Hassall Street Wetherill Park NSW 2164 AUSTRALIA

Telephone/Fax Number Tel: +61 2 9757 8800

Emergency Phone Number +61 1800 951 288; +61 3 9573 3188

Recommended use of the chemical and restrictions on use

Relevant identified uses: Aerosol spray paint. Application is by spray atomisation from a hand held aerosol pack. Use according to manufacturer's directions.

Additional Information

Website: www.itwpf.com.au

Chemical Name: Not Applicable Synonyms: Not Available Other means of identification: Not Available

Once connected and if the message is not in your prefered language then please dial 01

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Aerosols: Category 1 Acute toxicity: Category 4 - Oral Aspiration hazard: Category 1 Skin corrosion/irritation: Category 2 Eye damage/irritation: Category 2A Specific target organ toxicity (single exposure): Category 3 (Narcotic) Reproductive toxicity: Category 2 Specific target organ toxicity (repeated exposure): Category 2 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 3

Signal Word (s) DANGER

Hazard Statement (s)
AUH044 Risk of explosion if heated under confinement.
H222 Extremely flammable aerosol.
H229 Pressurized container: may burst if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
Page 1/18

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Pictogram (s)

Flame, Exclamation mark, Health hazard



Precautionary Statement – Prevention

P201 Obtain special instructions before use.

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.

Precautionary Statement – Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.

P331 Do NOT induce vomiting.

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

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

Precautionary Statement – Storage

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

Precautionary Statement – Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Toluene	108-88-3	10-<30 %weight
Naphtha Petroleum, Light Aromatic Solvent	64742-95-6.	0-<10 %weight
n-Butyl acetate	123-86-4	0-<10 %weight
Aluminium powder coated	7429-90-5	NotSpec
Dimethyl ether	115-10-6	30-<60 %weight

Other Information

Substances:

See section below for composition of Mixtures

Section 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

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

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 degrees 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 (pO2 <50 mm Hg or pCO2 > 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: o-Cresol in urine Index: 0.5 mg/L Sampling Time: End of shift Comments: B Determinant: Hippuric acid in urine Index: 1.6 g/g creatinine Sampling Time: End of shift Comments: B, NS Determinant: Toluene in blood Index: 0.05 mg/L Sampling Time: 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

Section 5 - Firefighting Measures

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 mayresult

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

Not Applicable

Decomposition Temperature Not Available

Precautions in connection with Fire

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.

Extinguishing Media - Small Fires

Water spray, dry chemical or CO2

Extinguishing Media - Large Fires

Water spray or fog.

Section 6 - Accidental Release Measures

Clean-up Methods - Small Spillages

Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses. Shut off all possible sources of ignition and increase ventilation.

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.

Section 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.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

Control parameters: Occupational Exposure Limits (OEL): INGREDIENT DATA: Source: Australia Exposure Standards Ingredient: toluene Material name: Toluene TWA: 50 ppm / 191 mg/m3 STEL: 574 mg/m3 / 150 ppm Peak: Not Available Notes: Not Available

Source: Australia Exposure Standards Ingredient: n-butyl acetate Material name: n-Butyl acetate TWA: 150 ppm / 713 mg/m3 STEL: 950 mg/m3 / 200 ppm Peak: Not Available Notes: Not Available

Source: Australia Exposure Standards Ingredient: aluminium powder coated Material name: Aluminium (metal dust) TWA: 10 mg/m3 STEL: Not Available Peak: Not Available Notes: Not Available

Source: Australia Exposure Standards Ingredient: aluminium powder coated Material name: Aluminium, pyro powders (as Al) TWA: 5 mg/m3 STEL: Not Available Peak: Not Available Notes: Not Available

Source: Australia Exposure Standards Ingredient: aluminium powder coated Material name: Aluminium (welding fumes) (as Al) TWA: 5 mg/m3 STEL: Not Available Peak: Not Available Notes: Not Available

Source: Australia Exposure Standards Ingredient: dimethyl ether Material name: Dimethyl ether TWA: 400 ppm / 760 mg/m3 STEL: 950 mg/m3 / 500 ppm Peak: Not Available Notes: Not Available

Emergency Limits: Ingredient: toluene Material name: Not Available TEEL-1: Not Available TEEL-2: Not Available TEEL-3: Not Available

Ingredient: naphtha petroleum, light aromatic solvent Material name: Not Available TEEL-1: 1,200 mg/m3 TEEL-2: 6,700 mg/m3 TEEL-3: 40,000 mg/m3

Ingredient: n-butyl acetate Material name: Not Available TEEL-1: Not Available TEEL-2: Not Available TEEL-3: Not Available

Ingredient: dimethyl ether Material name: Not Available TEEL-1: 3,000 ppm TEEL-2: 3800* ppm TEEL-3: 7200* ppm

Ingredient: toluene Original IDLH: 500 ppm Revised IDLH: Not Available

Ingredient: naphtha petroleum, light aromatic solvent Original IDLH: Not Available Revised IDLH: Not Available

Ingredient: n-butyl acetate Original IDLH: 1,700 ppm

Revised IDLH: Not Available

Ingredient: aluminium powder coated Original IDLH: Not Available Revised IDLH: Not Available

Ingredient: dimethyl ether Original IDLH: Not Available Revised IDLH: Not Available

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 and Face 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.

Thermal Hazards

Not Available

Body 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.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Aerosol - Liquid	Appearance	Silver liquid with a strong solvent odour; does not mix with water. Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable ether propellant.
Odour	Not Available	Melting/Freezing Point	Not Available
Boiling Point	111°C (IBP)	Decomposition Temperature	Not Available
Solubility in Water	Immiscible	рН	Not Applicable (as supplied) Not Applicable (as a solution (Not Available%))
Vapour Pressure	Under Pressure	Relative Vapour Density (Air=1)	>1
Evaporation Rate	Not Available	Physical State	Liquid
Odour Threshold	Not Available	Viscosity	Not Available
Volatile Component	Not Available	Partition Coefficient: n-octanol/water (log value)	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)		

Other Information Taste: Not Available Gas group: Not Available VOC g/L: Not Available

Section 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.

Possibility of hazardous reactions

See section 7(Handling and Storage)

Conditions to Avoid See section 7(Handling and Storage)

Incompatible Materials

See section 7(Handling and Storage) Page 9 / 18

Hazardous Decomposition Products

See section 5(Fire Fighting Measures)

Section 11 - Toxicological Information

Toxicology Information

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

Galmet Spraypaint Aerosol Silver:

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

For Low Boiling Point Naphthas (LBPNs):

Acute toxicity:

LBPNs generally have low acute toxicity by the oral (median lethal dose [LD50] in rats > 2000 mg/kg-bw), inhalation (LD50 in rats > 5000 mg/m3) and dermal (LD50 in rabbits > 2000 mg/kg-bw) routes of exposure

Most LBPNs are mild to moderate eye and skin irritants in rabbits, with the exception of heavy catalytic cracked and heavy catalytic reformed naphthas, which have higher primary skin irritation indices.

Sensitisation:

LBPNs do not appear to be skin sensitizers, but a poor response in the positive control was also noted in these studies Repeat dose toxicity:

The lowest-observed-adverse-effect concentration (LOAEC) and lowest-observed-adverse-effect level (LOAEL) values identified following short-term (2-89 days) and subchronic (greater than 90 days) exposure to the LBPN substances. These values were determined for a variety of endpoints after considering the toxicity data for all LBPNs in the group. Most of the studies were carried out by the inhalation route of exposure. Renal effects, including increased kidney weight, renal lesions (renal tubule dilation, necrosis) and hyaline droplet formation, observed in male rats exposed orally or by inhalation to most LBPNs, were considered species- and sex-specific These effects were determined to be due to a mechanism of action not relevant to humans -specifically, the interaction between hydrocarbon metabolites and alpha-2-microglobulin, an enzyme not produced in substantial amounts in female rats, mice and other species, including humans.

Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cycloparaffins.

The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell. 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.

Repeated dose toxicity: Animal studies show that chronic inhalation toxicity for C9 aromatic hydrocarbon solvents is slight.

Similarly, oral exposure does not appear to pose a high toxicity hazard for pure trimethylbenzene isomers.

Mutation-causing ability: No evidence of mutation-causing ability and genetic toxicity was found in animal and laboratory testing.

Reproductive and developmental toxicity: No definitive effects on reproduction were seen, although reduction in weight in developing animals may been seen at concentrations that are toxic to the mother.

For petroleum: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxic to the nervous system. This product contains toluene, and animal studies suggest high concentrations of toluene lead to hearing loss. This product contains ethyl benzene and naphthalene, from which animal testing shows evidence of tumour formation.

Cancer-causing potential: Animal testing shows inhaling petroleum causes tumours of the liver and kidney; these are however not considered to be relevant in humans.

Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including all recent studies in living human subjects (such as in petrol service station attendants).

Galmet Spraypaint Aerosol Silver:

Generally, linear and branched-chain alkyl esters are hydrolysed to their component alcohols and carboxylic acids in the intestinal tract, blood and most tissues throughout the body. Following hydrolysis the component alcohols and carboxylic acids are metabolized

Oral acute toxicity studies have been reported for 51 of the 67 esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids. The very low oral acute toxicity of this group of esters is demonstrated by oral LD50 values greater than 1850 mg/kg bw

Genotoxicity studies have been performed in vitro using the following esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids: methyl acetate, butyl acetate, butyl stearate and the structurally related isoamyl formate and demonstrates that these substances are not genotoxic.

The JEFCA Committee concluded that the substances in this group would not present safety concerns at the current levels of intake the esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids are generally used as flavouring substances up to average maximum levels of 200 mg/kg. Higher levels of use (up to 3000 mg/kg) are permitted in food categories such as chewing gum and hard candy.

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

Galmet Spraypaint Aerosol Silver:

No significant acute toxicological data identified in literature search.

Galmet Spraypaint Aerosol Silver:

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:

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.

Exposure to inhalation at a concentration of 600 parts per million for 8 hours resulted in the same and more serious symptoms including euphoria (a feeling of well-being), dilated pupils, convulsions and nausea.

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.

Skin Corrosion/Irritation

Data available to make classification

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.

Serious Eye Damage/Irritation

Data available to make classification

Respiratory Sensitisation

Data available but does not fill the criteria for classification

Skin Sensitisation

Data available but does not fill the criteria for classification

Carcinogenicity

Data available but does not fill the criteria for 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 available to make classification

Mutagenicity

Data available but does not fill the criteria for 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 extremeties (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.

Section 12 - Ecological Information

Ecotoxicity Not Available

Ingredient: Galmet Spraypaint Aerosol Silver Endpoint: Not Available Test Duration (hr): Not Available Effect: Not Available Value: Not Available Species: Not Available BCF: 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) 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: toluene Persistence: Water/Soil: LOW (Half-life = 28 days) Persistence: Air: LOW (Half-life = 4.33 days)

Ingredient: n-butyl acetate Persistence: Water/Soil: LOW Persistence: Air: LOW

Ingredient: dimethyl ether Persistence: Water/Soil: LOW Persistence: Air: LOW

Mobility

Mobility in soil: Ingredient: toluene Mobility: LOW (KOC = 268)

Ingredient: n-butyl acetate Mobility: LOW (KOC = 20.86)

Ingredient: dimethyl ether Mobility: HIGH (KOC = 1.292)

Bioaccumulative Potential

Ingredient: toluene Bioaccumulation: LOW (BCF = 90)

Ingredient: n-butyl acetate Bioaccumulation: LOW (BCF = 14)

Ingredient: dimethyl ether Bioaccumulation: LOW (LogKOW = 0.1)

Section 13 - Disposal Considerations

Waste Disposal

Product / Packaging 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.

Section 14 - Transport Information

UN Number 1950 Proper Shipping Name AEROSOLS Page 15 / 18

Transport Hazard Class 2.1

Hazchem Code Not Applicable

IERG Number 49

IATA UN Number 1950

IATA Proper Shipping Name Aerosols, flammable; Aerosols, flammable (engine starting fluid)

IATA Transport Hazard Class 2.1

IMDG UN Number 1950

IMDG Proper Shipping Name AEROSOLS

IMDG Transport Hazard Class 2.1

Additional Information Labels Required: Marine Pollutant: NO Not Applicable HAZCHEM: Not Applicable

Land transport (Not Applicable): 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: 63 190 277 327 344 381 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: 1000 ml

Transport in bulk according to Annex II of MARPOL and the IBC code: Source: Not Available Ingredient: Galmet Spraypaint Aerosol Silver Pollution Category: Not Available

Section 15 - Regulatory Information

Regulatory Information

Safety, health and environmental regulations / legislation specific for the substance or mixture: toluene(108-88-3) is found on the following regulatory lists Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6 Australian Inventory of Industrial Chemicals (AIIC) Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

naphtha petroleum, light aromatic solvent(64742-95-6.) is found on the following regulatory lists Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC) Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

n-butyl acetate(123-86-4) is found on the following regulatory lists Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC)

aluminium powder coated(7429-90-5) is found on the following regulatory lists Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC) International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

dimethyl ether(115-10-6) is found on the following regulatory lists Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australian Inventory of Industrial Chemicals (AIIC)

National Inventory / Status Australia - AIIC Canada - DSL Yes Canada - NDSL No (toluene; naphtha petroleum, light aromatic solvent; n-butyl acetate; aluminium powder coated; dimethyl ether) China - IECSC Yes Europe - EINEC / ELINCS /NLP Yes Japan - ENCS No (aluminium powder coated) Korea - KECI Yes New Zealand - NZIoC Yes Philippines - PICCS Yes USA - TSCA Yes

Legend:

Y = All ingredients are on the inventory

Poisons Schedule

N/A

Section 16 - Any Other Relevant Information

Empirical Formula & Structural Formula

Not Applicable

User Codes

User Title Label	User Codes
Wis Numbers	03411227

Other Information

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

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

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.