

# MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT :

GALMET Cold Galvanizing Aerosol

DATE :

(MSDS date)

01/11/2019

**1. Manufacturer/Supplier :** PPS Industries Limited  
86 Hugo Johnston Drive, Auckland  
New Zealand  
P.O.Box 12823, Penrose, Auckland 1642  
Phone : 64 9 579-1001  
Facsimile : 64 9 579-9497  
Emergency Phone : 0800 657-894  
Website: www.ppsindustries.co.nz

**Emergency Information :** National Poison Centre 0800 764-766  
Chemcall 24/7 Emergency Response Service : 0800 243-622

**13. Disposal Considerations :** Product  
Recommendation - Consult local or national regulations to ensure proper disposal.

Packaging  
Disposal must be made according to official regulations.

**16. Other Information :** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

# Galmet Cold Galvanizing

## ITW Polymers & Fluids (NZ)

Chemwatch: 4653-32

Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Issue Date: 01/11/2019

Print Date: 14/05/2021

Initial Date: 05/10/2005

S.GHS.NZLEN

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

#### Product Identifier

Product name	Galmet Cold Galvanizing
Chemical Name	Not Applicable
Synonyms	Zinc Rich Coating
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Chemical formula	Not Applicable
Other means of identification	Not Available

#### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Anti-corrosive zinc-rich surface coating for steel.
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#### Details of the supplier of the safety data sheet

Registered company name	ITW Polymers & Fluids (NZ)
Address	Unit 2/38 Trugood Drive, East Tamaki Not Available 2013 Auckland New Zealand
Telephone	09 272 1945
Fax	Not Available
Website	www.itwvf.co.nz
Email	Not Available

#### Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+61 2 9186 1132
Other emergency telephone numbers	+64 800 700 112

#### CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
+61 2 9186 1132	+64 800 700 112	Not Available

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

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

Classification [1]	Flammable Liquid Category 3, Skin Corrosion/Irritation Category 3, Acute Aquatic Hazard Category 1, Chronic Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria Gazetted by EPA New	3.1C, 6.3B, 9.1A, 9.1B

Zealand

## Label elements

Hazard pictogram(s)



Signal word **Warning**

## Hazard statement(s)

H226	Flammable liquid and vapour.
H316	Causes mild skin irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

## Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.

## Precautionary statement(s) Response

P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P391	Collect spillage.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

## Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
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## Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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## SECTION 3 Composition / information on ingredients

### Substances

See section below for composition of Mixtures

### Mixtures

CAS No	%[weight]	Name
7440-66-6	>60	<u>zinc</u>
64742-95-6.	10-30	<u>naphtha petroleum, light aromatic solvent</u>

## SECTION 4 First aid measures

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

### Description of first aid measures

General

Eye Contact

If this product comes in contact with the eyes:

- ▶ Wash out immediately 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.
- ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.

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<b>Skin Contact</b>	<ul style="list-style-type: none"><li>▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li></ul> <p>If skin contact occurs:</p> <ul style="list-style-type: none"><li>▸ Immediately remove all contaminated clothing, including footwear.</li><li>▸ Flush skin and hair with running water (and soap if available).</li><li>▸ Seek medical attention in event of irritation.</li></ul>
<b>Inhalation</b>	<ul style="list-style-type: none"><li>▸ If fumes or combustion products are inhaled remove from contaminated area.</li><li>▸ Lay patient down. Keep warm and rested.</li><li>▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li><li>▸ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li><li>▸ Transport to hospital, or doctor, without delay.</li></ul>
<b>Ingestion</b>	<ul style="list-style-type: none"><li>▸ For advice, contact a Poisons Information Centre or a doctor at once.</li><li>▸ Urgent hospital treatment is likely to be needed.</li><li>▸ <b>If swallowed do NOT induce vomiting.</b></li><li>▸ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li><li>▸ Observe the patient carefully.</li><li>▸ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li><li>▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li><li>▸ Transport to hospital or doctor without delay.</li></ul>

### Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO<sub>2</sub> 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury 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 (adrenalin) 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 of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]
- Absorption of zinc compounds occurs in the small intestine.
- The metal is heavily protein bound.
- Elimination results primarily from faecal excretion.
- The usual measures for decontamination (Ipecac Syrup, lavage, charcoal or cathartics) may be administered, although patients usually have sufficient vomiting not to require them.
- CaNa<sub>2</sub>EDTA has been used successfully to normalise zinc levels and is the agent of choice.

[Ellenhorn and Barceloux: Medical Toxicology]

Copper, magnesium, aluminium, antimony, iron, manganese, nickel, zinc (and their compounds) in welding, brazing, galvanising or smelting operations all give rise to thermally produced particulates of smaller dimension than may be produced if the metals are divided mechanically. Where insufficient ventilation or respiratory protection is available these particulates may produce "metal fume fever" in workers from an acute or long term exposure.

- Onset occurs in 4-6 hours generally on the evening following exposure. Tolerance develops in workers but may be lost over the weekend. (Monday Morning Fever)
- Pulmonary function tests may indicate reduced lung volumes, small airway obstruction and decreased carbon monoxide diffusing capacity but these abnormalities resolve after several months.
- Although mildly elevated urinary levels of heavy metal may occur they do not correlate with clinical effects.
- The general approach to treatment is recognition of the disease, supportive care and prevention of exposure.
- Seriously symptomatic patients should receive chest x-rays, have arterial blood gases determined and be observed for the development of tracheobronchitis and pulmonary edema.

[Ellenhorn and Barceloux: Medical Toxicology]

## SECTION 5 Firefighting measures

### Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

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**Galmet Cold Galvanizing**

**Special hazards arising from the substrate or mixture**

<b>Fire Incompatibility</b>	<ul style="list-style-type: none"> <li>▶ Reacts with acids producing flammable / explosive hydrogen (H2) gas</li> <li>▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result</li> </ul>
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**Advice for firefighters**

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ May be violently or explosively reactive.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water course.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>▶ Liquid and vapour are flammable.</li> <li>▶ Moderate fire hazard when exposed to heat or flame.</li> <li>▶ Vapour forms an explosive mixture with air.</li> <li>▶ Moderate explosion hazard when exposed to heat or flame.</li> </ul> <p>Combustion products include: carbon dioxide (CO2) other pyrolysis products typical of burning organic material. metal oxides</p>

**SECTION 6 Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>▶ Remove all ignition sources.</li> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> <li>▶ Control personal contact with the substance, by using protective equipment.</li> </ul>
<b>Major Spills</b>	<ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ May be violently or explosively reactive.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> </ul>
	Personal Protective Equipment advice is contained in Section 8 of the SDS.

**SECTION 7 Handling and storage**

**Precautions for safe handling**

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> <li>▶ Electrostatic discharge may be generated during pumping - this may result in fire.</li> <li>▶ Ensure electrical continuity by bonding and grounding (earthing) all equipment.</li> <li>▶ Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (&lt;=1 m/sec until fill pipe submerged to twice its diameter, then &lt;= 7 m/sec).</li> <li>▶ Avoid splash filling.</li> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of overexposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>▶ Store in original containers in approved flame-proof area.</li> <li>▶ No smoking, naked lights, heat or ignition sources.</li> <li>▶ <b>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</b></li> <li>▶ Keep containers securely sealed.</li> </ul>

**Conditions for safe storage, including any incompatibilities**

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>▶ <b>CARE:</b> Packing of high density product in light weight metal or plastic packages may result in container collapse with product release</li> <li>▶ Heavy gauge metal packages / Heavy gauge metal drums</li> <li>▶ Packing as supplied by manufacturer.</li> <li>▶ Plastic containers may only be used if approved for flammable liquid.</li> <li>▶ Check that containers are clearly labelled and free from leaks.</li> </ul>
<b>Storage incompatibility</b>	Avoid storage with oxidisers

**SECTION 8 Exposure controls / personal protection**

**Control parameters**

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Occupational Exposure Limits (OEL)

INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	zinc	Particulates not otherwise classified respirable dust	3 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	zinc	Particulates not otherwise classified	10 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
zinc	Not Available	6 mg/m3	21 mg/m3	120 mg/m3
naphtha petroleum, light aromatic solvent	Not Available	1,200 mg/m3	6,700 mg/m3	40,000 mg/m3

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

Exposure controls

Appropriate engineering controls	<p>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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> <li>▶ Safety glasses with side shields.</li> <li>▶ Chemical goggles.</li> <li>▶ 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.</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul style="list-style-type: none"> <li>▶ Wear chemical protective gloves, e.g. PVC.</li> <li>▶ Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul> <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care.</p>
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ PVC Apron.</li> <li>▶ PVC protective suit may be required if exposure severe.</li> <li>▶ Eyewash unit.</li> <li>▶ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.</li> <li>▶ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).</li> <li>▶ Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds.</li> </ul>
Thermal hazards	Not Available

Respiratory protection

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

**SECTION 9 Physical and chemical properties****Information on basic physical and chemical properties**

<b>Appearance</b>	Grey viscous flammable liquid; does not mix with water.		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	2.52
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	507
<b>pH (as supplied)</b>	Not Applicable	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	>21 @40C
<b>Initial boiling point and boiling range (°C)</b>	150-185	<b>Molecular weight (g/mol)</b>	Not Applicable
<b>Flash point (°C)</b>	38-50	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	<1 BuAC = 1	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Flammable.	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	7	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	0.6	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	1.3 @20C	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Immiscible	<b>pH as a solution (1%)</b>	Not Applicable
<b>Vapour density (Air = 1)</b>	>1	<b>VOC g/L</b>	270

**SECTION 10 Stability and reactivity**

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	<ul style="list-style-type: none"> <li>▶ Unstable in the presence of incompatible materials.</li> <li>▶ Product is considered stable.</li> <li>▶ Hazardous polymerisation will not occur.</li> </ul>
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

**SECTION 11 Toxicological information****Information on toxicological effects**

<b>Inhaled</b>	<p>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.</p> <p>Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.</p>
<b>Ingestion</b>	<p>Accidental ingestion of the material may be damaging to the health of the individual.</p> <p>Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.</p> <p>Soluble zinc salts produce irritation and corrosion of the alimentary tract with pain, and vomiting. Death can occur due to insufficiency of food intake due to severe narrowing of the oesophagus and pylorus.</p> <p>Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed.</p>
<b>Skin Contact</b>	<p>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.</p> <p>There is some evidence to suggest that the material may cause mild but significant 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.</p>

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Open cuts, abraded or irritated skin should not be exposed to this material  
The material may accentuate any pre-existing dermatitis condition  
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** There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin.

**Chronic** Welding or flame cutting of metals with zinc or zinc dust coatings may result in inhalation of zinc oxide fume; high concentrations of zinc oxide fume may result in "metal fume fever"; also known as "brass chills", an industrial disease of short duration. [I.L.O] Symptoms include malaise, fever, weakness, nausea and may appear quickly if operations occur in enclosed or poorly ventilated areas.

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TOXICITY

IRRITATION

Galmet Cold Galvanizing

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IRRITATION

**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

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No significant acute toxicological data identified in literature search.  
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.

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 LBPNS 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.

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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 cyclo-paraffins.

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



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testing.

Reproductive and developmental toxicity: No definitive effects on reproduction were seen, although reduction in weight in developing animals may be 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).

Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✗	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

**Legend:** ✓ – Data available to make classification  
✗ – Data available but does not fill the criteria for classification  
⊖ – Data Not Available to make classification

SECTION 12 Ecological information

Toxicity

Not Available

Ingredient	Endpoint	Test Duration (hr)	Effect	Value	Species	BCF
Galmet Cold Galvanizing	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Galmet Cold Galvanizing	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Galmet Cold Galvanizing	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Very toxic 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 petroleum distillates:

Environmental fate:

When petroleum substances are released into the environment, four major fate processes will take place: dissolution in water, volatilization, biodegradation and adsorption. These processes will cause changes in the composition of these UVCB substances. In the case of spills on land or water surfaces, photodegradation-another fate process-can also be significant.

As noted previously, the solubility and vapour pressure of components within a mixture will differ from those of the component alone.

For Zinc and its Compounds: BCF: 4 to 24,000.

Environmental Fate: Zinc is capable of forming complexes with a variety of organic and inorganic groups and is an essential nutrient present in all organisms.

Atmospheric Fate: Zinc concentrations in the air are relatively low, except near industrial sources, such as smelters. There is no estimate for the atmospheric lifetime of zinc, but, since zinc is transported long distances in air, its lifetime in air is at least on the order of days.

**DO NOT discharge into sewer or waterways.**

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients



**SECTION 13 Disposal considerations**

**Waste treatment methods**

<p><b>Product / Packaging disposal</b></p>	<p>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:</p> <ul style="list-style-type: none"> <li>▸ Reduction</li> <li>▸ Reuse</li> <li>▸ Recycling</li> <li>▸ Disposal (if all else fails)</li> </ul> <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.</p> <ul style="list-style-type: none"> <li>▸ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▸ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▸ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▸ Where in doubt contact the responsible authority.</li> <li>▸ Recycle wherever possible.</li> <li>▸ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>▸ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).</li> <li>▸ Decontaminate empty containers.</li> </ul>
	<p>Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017</p>

**SECTION 14 Transport information**

**Labels Required**

	
<p><b>Marine Pollutant</b></p>	
<p><b>HAZCHEM</b></p>	<p>•3Y</p>

**Land transport (UN)**

<p><b>UN number</b></p>	<p>1263</p>
<p><b>Packing group</b></p>	<p>III</p>
<p><b>UN proper shipping name</b></p>	<p>PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)</p>
<p><b>Environmental hazard</b></p>	<p>No relevant data</p>
<p><b>Transport hazard class(es)</b></p>	<p>Class 3 Subrisk Not Applicable</p>
<p><b>Special precautions for user</b></p>	<p>Special provisions 163; 223; 367 Limited quantity 5 L</p>

**Air transport (ICAO-IATA / DGR)**

<p><b>UN number</b></p>	<p>1263</p>
<p><b>Packing group</b></p>	<p>III</p>
<p><b>UN proper shipping name</b></p>	<p>Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)</p>
<p><b>Environmental hazard</b></p>	<p>No relevant data</p>
<p><b>Transport hazard class(es)</b></p>	<p>ICAO/IATA Class 3 ICAO / IATA Subrisk Not Applicable</p>

Galmet Cold Galvanizing

<b>Special precautions for user</b>	ERG Code	3L
	Special provisions	A3 A72 A192
	Cargo Only Packing Instructions	366
	Cargo Only Maximum Qty / Pack	220 L
	Passenger and Cargo Packing Instructions	355
	Passenger and Cargo Maximum Qty / Pack	60 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y344
	Passenger and Cargo Limited Maximum Qty / Pack	10 L

Sea transport (IMDG-Code / GGVSee)

<b>UN number</b>	1263
<b>Packing group</b>	III
<b>UN proper shipping name</b>	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
<b>Environmental hazard</b>	Marine Pollutant
<b>Transport hazard class(es)</b>	IMDG Class 3
	IMDG Subrisk Not Applicable
<b>Special precautions for user</b>	EMS Number F-E , S-E
	Special provisions 163 223 367 955
	Limited Quantities 5 L

Transport in bulk according to Annex II of MARPOL and the IBC code

Source	Ingredient	Pollution Category
Not Available	Galmet Cold Galvanizing	Not Available

SECTION 15 Regulatory information

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

This substance is to be managed using the conditions specified in an applicable Group Standard. This substance can be managed under the controls specified in the Transfer Notice or alternatively it may be managed using the conditions specified in an applicable Group Standard.

HSR Number	Group Standard
HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2017

zinc(7440-66-6) is found on the following regulatory lists

- New Zealand Approved Hazardous Substances with controls
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data
- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Workplace Exposure Standards (WES)

naphtha petroleum, light aromatic solvent(64742-95-6.) is found on the following regulatory lists

- Chemical Footprint Project - Chemicals of High Concern List
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
- New Zealand Approved Hazardous Substances with controls
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
- New Zealand Inventory of Chemicals (NZIoC)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
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Continued...

**Galmet Cold Galvanizing**

3.1C	500 L in containers more than 5 L	250 L
3.1C	1 500 L in containers up to and including 5 L	250 L

**Certified Handler**

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

<b>Class of substance</b>	<b>Quantities</b>
Not Applicable	Not Applicable

Refer Group Standards for further information

<b>National Inventory</b>	<b>Status</b>
Australia - AIIIC	
Canada - DSL	Yes
Canada - NDSL	No (zinc; naphtha petroleum, light aromatic solvent)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (zinc)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
<b>Legend:</b>	<i>Y = All ingredients are on the inventory</i>

**SECTION 16 Other information**

**Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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.

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