



Issue Date: Aug 2009

Page 1 of 10

# Direct Injection Power 3 (Aerosol)

## Material Safety Data Sheet

### SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Wynn's Direct Injection Power 3 (Aerosol)		
<b>Other Names</b>	<b>DIP 3 Aerosol</b> 23079 200ML AEROSOLS / ADG		
<b>Recommended Use</b>	Cleaner for vehicle engine throttle bodies in aerosol form		
<b>Supplier Name</b>	Wynn's Australia Pty Ltd An (ITW), Illinois Tool Works Company ABN 73 000 370 150		
<b>Address</b>	100 Hassall Street, Wetherill Park NSW 2164 Private Bag 35, Wetherill Park DC NSW 2164		
<b>Telephone Number</b>	(02) 9828 0900 Email: <a href="mailto:wynnsaus@wynns.net">wynnsaus@wynns.net</a> Website: <a href="http://www.wynns.net">www.wynns.net</a>		
<b>Emergency Phone Number</b>	(02) 9828 0900	Monday-Friday	8.00am – 5.00pm
	13 11 26 (24 hours Australia) Poisons Information Centre (PIC)		
	0800 764 766 (New Zealand) Poisons Information Centre (PIC)		

### SECTION 2 HAZARDS IDENTIFICATION

<b>Hazard Classification</b>	HAZARDOUS SUBSTANCE. DANGEROUS GOODS. Classified as hazardous according to the criteria of NOHSC. Classified as Dangerous Goods according to the criteria of the ADG Code.
<b>Risk Phrase</b>	R 20/21 Harmful by inhalation and in contact with skin. R 36/37/38 Irritating to the eyes, respiratory system and the skin. R 51/53 Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. R 65 May cause lung damage if swallowed. R 66 Repeated exposure may cause drying and cracking of the skin.

**Safety Phrase**

S 2 Keep out of reach of children.  
 S 14 Keep away from heat, ignition sources and oxidisers.  
 S 23 Do not breathe vapour.  
 S 24/25 Avoid contact with skin or eyes.  
 S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 S 60 This material and its container must be disposed of as hazardous wastes.

<b>SECTION 3</b>	<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>
------------------	---

**Pure substances**

Not applicable – Mixture

**Mixtures**

Chemical Identity	CAS Number	Proportion
Xylene	1330-20-7	30 - 40%
Hydrocarbon Gas	68476-86-8	10 - <30%
Acetone	67-64-1	10 - <20%
Ethyl Benzene	100-41-4	<15%
Other non-hazardous ingredients	-	<1%

<b>SECTION 4</b>	<b>FIRST AID MEASURES</b>
------------------	---------------------------

**Ingestion**

Do NOT induce vomiting. Rinse mouth with water. If symptoms persist, seek prompt medical assistance.

**Skin**

Remove contaminated clothing and footwear (while under safety shower if appropriate). Flush affected area with water for 3-5 minutes followed by washing gently with soap and water for a further 5 minutes. Rinse well and pat dry. If symptoms persist, seek prompt medical attention.

**Eye**

Immediately: Hold eye open and flush with clean water for at least 15 minutes. While flushing, gently pull upper and lower eyelids away from eyes and ensure carefully flushed. If symptoms persist, seek prompt medical attention.

**Inhalation**

Remove the patient (while wearing SCBA if concentrations are high) to fresh air. Allow to rest. Rinse mouth and nose with water. Provide artificial respiration if breathing stops. Seek prompt medical attention unless recovery is virtually immediate. Inhaling concentrated vapours ("Chroming") may prove fatal. Cases of "chroming" must be medically examined even if patient has apparently recovered.

**First Aid Facilities**

Provide normal industrial first aid facilities including eye-wash stations and safety showers as appropriate.

**Advice to Doctor**

Prolonged or repeated skin exposure may lead to dermatitis. Prolong exposure to high vapour concentrations may lead to CNS effects and liver or kidney disorders. "Chroming" may cause heart failure or damage, and brain damage through CNS effects. Aspiration of vomitus may cause chemical pneumonitis. A few unconfirmed cases of skin sensitisation after prolonged or repeated exposures have been reported.

Asthmatics and sufferers of other bronchial disorders should exercise particular care when working with aerosols. Provide supportive care and treatment based on the patient's reactions to the exposure.

Contains 150 g/kg Ethyl Benzene.

Contains 400 g/kg Xylene.

Contains 200 g/kg Acetone.

Acetone can be detected in the blood and urine, and has been used as an index of exposure.

**SECTION 5****FIRE FIGHTING MEASURES****Suitable Extinguishing Media**

Foam, dry chemical, water delivered as fine spray or fog. Water may be ineffective due to low flash point of material.

**Hazards From Combustion Products**

Carbon dioxide, carbon monoxide, complex hydrocarbons may be formed on combustion. Vapour highly flammable. Fire may produce irritating or poisonous gases. Heat may cause violent rupture of containers. Vapours may travel significant distances to a source of ignition and flash back to the point of origin. Vapours may "pool" in low-lying areas. In storage fires, aerosol cans may "bleve", spreading burning liquid in their travel thus spreading fires.

**Precautions For Fire Fighters**

Avoid bodily contact with substance or run-off. Contain run-off for later collection and controlled disposal. Be aware of potential for "mini-bleves".

**Special Protective Equipment**

Wear SCBA and full turn out clothing.

**Hazchem Code**

None allocated.

**SECTION 6****ACCIDENTAL RELEASE MEASURES****Emergency Procedures**

Switch off or remove all potential ignition sources. Prevent material entering drains or waterways. Send unnecessary personnel out of area. Wear full protective clothing including rubber boots and respirator. If ventilation is poor, use SCBA.

**Methods and Materials for Containment and Clean Up Procedures**

Spread sand, soil or other inert absorbent over liquid. When saturated, collect into pails or drums, fit lids, label and place in a safe area to await disposal. Collect undamaged cans for return to store. Collect damaged or leaking cans, place in recovery drums for return to supplier or disposal under local authority approval.

## SECTION 7 HANDLING AND STORAGE

### Precautions for Safe Handling

Wear suitable protective clothing. Ensure appropriate fire prevention measures are in place.

### Conditions for Safe Storage

Store in accordance with AS/NZS 3833 or AS 1940 and local regulations. Note that many authorities require that aerosols are housed in caged enclosures to prevent the travel of "bleves". Keep away from incompatibles in accordance with the Australian Standards.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### National Exposure Standards

Name	ES-TWA	ES-STEL	ES-Peak
None established for product.	-	-	-

Established for ingredients

Hydrocarbon Gas	1800 mg/m <sup>3</sup>	None Allocated	-
Xylene	80 ppm 350 mg/m <sup>3</sup>	150 ppm 655 mg/m <sup>3</sup>	-
Acetone	500 ppm 1,185 mg/m <sup>3</sup>	1,000 ppm 2,375 mg/m <sup>3</sup>	-
Ethyl Benzene	100 ppm 434 mg/m <sup>3</sup>	125 ppm 543 mg/m <sup>3</sup>	

### Alternative Standards

Ingredient	OSHA (PEL)	ACGIH (TLV-TWA)
Acetone	750 ppm	750 ppm
Xylene	100 ppm	100 ppm
Ethyl Benzene	100 ppm	100 ppm

### Biological Limit Values

No biological limit allocated.

### Engineering Controls

Use in well ventilated areas and ensure ventilation is adequate to maintain air concentrations below TWAs. Use local exhaust ventilation (flame-proof) in enclosed areas if necessary.

### Personal Protective Equipment

#### Respiratory Protection

Not usually required. If exposure standards may be exceeded, use an organic vapour respirator to AS 1715 & 1716. Use SCBA in confined spaces.

#### Eye / Face Protection

Use safety glasses with side shields or goggles to AS 1337.

#### Skin Protection

Use butyl rubber or PVA gloves to AS 2161. Wear Tyvec or cotton coveralls fastened at the neck and wrists. Supplement with PVA apron if required.

#### Thermal Hazards

None required.

<b>SECTION 9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
------------------	---

<b>Appearance</b>	Clear pale yellow aerosol spray
<b>Odour</b>	Aromatic
<b>pH Value</b>	Not applicable
<b>Vapour Pressure</b>	1820 mm Hg @ 25°C (Gas)
<b>Vapour Density</b>	> 1 (air = 1) @ 20°C
<b>Boiling Point/Range</b>	-43°C to 149°C
<b>Freezing Point</b>	Not applicable
<b>Melting Point</b>	Not applicable
<b>Solubility</b>	Insoluble in water
<b>Density</b>	0.777 @ 15°C
	0.896 @ 15°C (Concentrate)
<b>Flash Point</b>	4°C (PMCC) as concentrate. -60°C as gas.
<b>Flammable Limits</b>	1.9 to 8.5% (Gas)
<b>Ignition Temperature</b>	287°C (Gas)
<b>Volatiles</b>	100.0% volume

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY</b>
-------------------	---------------------------------

<b>Chemical Stability</b>	Under all normal conditions of use at normal temperatures and pressure the product is stable.
<b>Conditions to Avoid</b>	Heat and ignition sources.
<b>Incompatible Materials</b>	Oxidising substances.
<b>Hazardous Decomposition Products</b>	Oxides of carbon.
<b>Hazardous Reactions</b>	No hazardous polymerisation will occur.

<b>SECTION 11</b>	<b>TOXICOLOGICAL INFORMATION</b>
-------------------	----------------------------------

<b>Toxicology Information</b>	Hydrocarbon Gas: LC <sub>50</sub> Inhal Rat 4 hr 658 g/m <sup>3</sup> Harmful by inhalation. Harmful if swallowed.
<b>Acute Health Effects</b>	
<b>Ingestion</b>	Harmful if swallowed. May cause chemical pneumonia if aspirated into the bronchial system during vomiting. Will cause central nervous system depression.
<b>Inhalation</b>	High concentration of solvent vapours can be harmful in enclosed spaces. Vapours are harmful if inhaled. Irritant to upper respiratory tract. May cause dizziness, nausea, vomiting.

**Eye** Solvent vapours will cause irritation to eyes. Severe irritant to eyes. Will cause burning of eyes, blurred vision, watery eyes.

**Skin** Irritant to skin. Skin contact may produce a burning sensation, redness, defatting of skin. Can be absorbed through skin. Repeated exposures may cause drying and cracking of the skin.

### Chronic Health Effects

#### Ingestion

Xylene – Mildly toxic by ingestion  
orl-hmn LDLo : 50 mg / kg  
orl-rat LD50 : 4300 mg / kg

Ethyl Benzene – Moderately toxic by ingestion  
orl-rat LD50 : 3500 mg / kg

Acetone – Moderately toxic by ingestion  
Human systemic effects by ingestion: coma, kidney damage, and metabolic changes. Narcotic in high concentration.  
orl-man TDLo : 2857 mg / kg  
orl-rat LD50 : 5800 mg / kg  
orl-mus LD50 : 3000 mg / kg  
orl-dog LDLo : 8000 mg / kg  
orl-rbt LD50 : 5340 mg / kg

#### Inhalation

Excessive inhalation of vapours can affect the central nervous system leading to a loss of coordination and impaired judgment. Prolonged exposure can lead to stupor or unconsciousness. Deliberate inhalation of concentrated vapours, commonly known as “chroming”, may prove fatal.

Xylene – Mildly toxic by inhalation.  
Human systemic effects by inhalation: olfactory changes, conjunctiva irritation and pulmonary changes.  
inl-hmn LCLo : 6125 ppm / 12H  
inl-rat TCLo : 150 mg / m<sup>3</sup> / 24 H  
inl-mus LCLo : 30 g / m<sup>3</sup>

Ethyl Benzene – Mildly toxic by inhalation.  
Human systemic effects by inhalation: eye, sleep and pulmonary changes.  
A concentration of 0.2% is extremely irritating at first, then causes dizziness, irritation of the nose and throat and a sense of constriction in the chest. Exposure of guinea pigs to 1% concentration has been reported as causing ataxia, loss of consciousness, tremor of the extremities and finally death through respiratory failure. The pathological findings were congestion of the brain and lungs with edema.  
inl-hmn TCLo : 100 ppm / 8H  
inl-rat TCLo : 600 mg / m<sup>3</sup> / 24 H  
inl-rbt TCLo : 1000 mg / m<sup>3</sup> / 24 H  
inl-mus LCLo : 50 g / m<sup>3</sup> / 2 H

Acetone – Moderately toxic by inhalation. Human systemic effects by inhalation: changes in EEG, changes in carbohydrate metabolism, nasal effects, conjunctiva irritation, respiratory system effects, nausea and vomiting, and muscle weakness.

In industry, no injurious effects have been reported other than headache from prolonged inhalation.

inh-man TClO : 12,000 ppm / 4 H

inh-rat LC50 : 50,100 mg / m<sup>3</sup> / 8 H

inl-mus LClO : 110 g / m<sup>3</sup> / 1 H

## Eye

Xylene – A severe eye irritant.

Some temporary corneal effects are noted, as well as some conjunctival irritation by instillation (adding drops to the eyes one at a time). Irritation can start at 200 ppm.

eye-hmn 200 ppm

eye-rbt 87 mg MILD

eye-rbt 5 mg / 24H SEVERE

Ethyl Benzene – An eye irritant

A concentration of 0.1% of the vapour in air is an irritant to human eyes.

eye-rbt 100 mg

Acetone – A severe eye irritant

eye-hmn 500 ppm

eye-rbt 20 mg / 24H MODERATE

## Skin

Xylene – A skin irritant

skn-rbt 500 mg / 24H MODERATE

Ethyl Benzene – Mildly toxic by skin contact.

A skin irritant.

skn-rbt 15 mg / 24H open MILD

skin-rbt LD50 : 17,800 mg / kg

Acetone – A skin irritant. In industry, no injurious effects have been reported other than skin irritation resulting from its defatting action.

skn-rbt 500 mg / 24H MILD

skn-rbt LD50 : 20 g / kg

## Other Effects of Prolonged/Repeated Overexposure

This material contains a trace amount of chemical that has been identified as a carcinogen by NTP, IARC or OSHA.

Vapours in a confined area in high concentrations are anesthetic.

Overexposure may result in light headiness, dizziness, nausea.

Prolonged and repeated over-exposure to solvents may result in permanent brain and nervous system damage. May cause kidney and liver damage.

**SECTION 12                      ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Toxic to aquatic organisms.
<b>Persistence/ Degradability</b>	May have long term adverse effects in the aquatic environment.
<b>Mobility</b>	Not available.

**SECTION 13                      DISPOSAL CONSIDERATIONS**

<b>Disposal Methods</b>	Disposal must be in accordance with local regulations for hazardous industrial wastes.
<b>Special Precautions for Landfill or Incineration</b>	None allocated.

**SECTION 14                      TRANSPORT INFORMATION**

<b>UN Number</b>	1950
<b>Proper Shipping Name</b>	AEROSOLS
<b>Class and Subsidiary Risk</b>	2.1 and 3
<b>Packing Group</b>	None allocated.
<b>Special Precautions for User</b>	None allocated.
<b>Hazchem Code</b>	None allocated.

<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
-------------------	-------------------------------

<b>Poisons Schedule</b>	Not scheduled under SUSDP.
<b>Hazard Category</b>	Harmful / NOHSC : 10005 (1999). AEROSOLS / ADG Code Sixth Edition (1998).

<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
-------------------	--------------------------

**Acronyms**

ABN	Australian Business Number
ACGIH	American Conference of Governmental Industrial Hygienists
ADG	Australian Dangerous Goods
AICS	Australian Inventory of Chemical Substances
AS	Australian Standard
CAS	Chemical Abstracts Service (USA)
COC	Cleveland Open Cup
EPA	Environment Protection Agency (Australian States)
IARC	International Agency for Research on Cancer
IP	Institute of Petroleum (UK)
NIOSH	National Institute for Occupational Safety and Health (USA)
NOHSC	National Occupational Health and Safety Commission (Australia)
NTP	National Toxicology Program (USA)
NZS	New Zealand Standard
OSHA	Occupational Safety and Health Administration (USA)
PEL	Permissible Exposure Level
PMCC	Pensky – Martens Closed Cup
SCBA	Self-Contained Breathing Apparatus
STEL	Short Term Exposure Limit
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons (Australia)
TLV	Threshold Limit Value
TWA	Time Weighted Average
UN	United Nations

**Abbreviations**

cP	centiPoise
cSt	centiStoke
g	gram
Hg	Mercury
kPa	kiloPascal
L	litre
m <sup>3</sup>	cubic metre
mg	milligram
mL	millilitre
mm	millimetre
°C	degrees of temperature in Celsius (Centigrade)
%	percent(age)

**Note**

This form has been prepared in accordance with the National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011 (2003)] issued by the National Occupation Health and Safety Commission April 2003.

All information contained in this form is as accurate as possible at the time of issue. The data contained herein is not to be taken as an expressed or implied warranty or representation, for which Wynn's Australia Pty Ltd assumes legal responsibility. No responsibility for damages resulting from use of the information is given, other than those implied mandatorily by Federal or State Government Legislation.

**END OF MATERIAL SAFETY DATA SHEET**