A NEW FORCE IN CHEMICAL MANUFACTURING

Unit 2, 14-16 Lee Holm Road
St Marys NSW 2760
Australia

Ph: 1300 738 250 (Australia)
Ph: +61 2 9833 9766 (International)
Fax: 02 9623 3670

sales@chemtools.com.au
www.chemtools.com.au

SAFETY DATA SHEET

ISSUED NOVEMBER, 2017 (VALID 5 YEARS FROM DATE OF ISSUE)

Chemtools DVP Developer Aerosol

Section 1 - Identification of The Material and Supplier

Chemtools Pty Ltd **Phone: 1300 738 250 (business hours)**
Unit 2/14-16 Lee Holm Road **Fax: 02 9623 3670**
St Marys NSW 2760 **www.chemtools.com.au**

Chemical nature:	Blend of solvents and talc. Presented as an aerosol.
Product Name:	**Chemtools DVP Developer Aerosol**
Product Code:	CT-DVP-300
Product Use:	Industrial applications.
Creation Date:	**February, 2015**

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. Hazardous according to the criteria of SWA.

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

Risk Phrases: R36, R66, R67. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
Safety Phrases: S16, S23, S36, S51, S24/25. Keep away from sources of ignition - No smoking. Do not breathe vapours or spray mists. Wear suitable protective clothing. Use only in well ventilated areas. Avoid contact with skin and eyes.
SUSMP Classification: S5
ADG Classification: Class 2.1: Flammable gases.
UN Number: 1950, AEROSOLS

GHS Signal word: WARNING

HAZARD STATEMENT:

H223: Flammable aerosol.
H280: Contains gas under pressure; may explode if heated.
AUH066: Repeated exposure may cause skin dryness or cracking.
H305: May be harmful if swallowed and enters airways.
H336: May cause drowsiness or dizziness.

PREVENTION

P102: Keep out of reach of children.
P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P261: Avoid breathing fumes, mists, vapours or spray.
P262: Do not get in eyes, on skin, or on clothing.
P271: Use only outdoors or in a well ventilated area.
P281: Use personal protective equipment as required.

WELDING TECHNOLOGY
SUPPLIERS OF WELDING AND ENGINEERING EQUIPMENT
Ph: 09 274 1246
info@weldingtechnology.co.nz
www.weldingtechnology.co.nz

RESPONSE

P312: Call a POISON CENTRE or doctor if you feel unwell.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P370+P378: In case of fire, use carbon dioxide, dry chemical, foam. Water fog or fine spray is the preferred medium for large fires.

STORAGE

P402+P404: Store in a dry place. Store in a closed container.
P403+P235: Store in a well-ventilated place. Keep cool.
P410+P412: Store below 30°C, protect from direct sunlight and do not expose to temperatures exceeding 50°C.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Emergency Overview

Physical Description & Colour: Whiye liquid presented as an aerosol.
Odour: Characteristic odour.
Major Health Hazards: Exposure can cause respiratory tract and throat irritation, headaches, shortness of breath and symptoms similar to intoxication. Overexposure can produce severe central nervous system depression, coma and respiratory failure. This product is an eye irritant, repeated exposure may cause skin dryness or cracking, vapours may cause drowsiness and dizziness.

Potential Health Effects

Inhalation:

Short Term Exposure: High vapour pressures may cause drowsiness and dizziness. In addition product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.
Long Term Exposure: Vapours may cause drowsiness and dizziness.

Skin Contact:

Short Term Exposure: Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite.
Long Term Exposure: Repeated exposure may cause skin dryness or cracking.

Eye Contact:

Short Term Exposure: If sprayed directly in the eye, this product will irritate. If spraying is prolonged, it may cause damage through frostbite.
Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.
Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: Isopropanol is Class 3 - unclassifiable as to carcinogenicity to humans.
Talc is Class 3 - unclassifiable as to carcinogenicity to humans.
See the IARC website for further details. A web address has not been provided as addresses frequently change.

WELDING TECHNOLOGY
SUPPLIERS OF WELDING AND ENGINEERING EQUIPMENT
Ph: 09 274 1246
info@weldingtechnology.co.nz
www.weldingtechnology.co.nz

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m^3)	STEL (mg/m^3)
Acetone	67-64-1	59	1185	2375
Isopropanol	67-63-0	10-30	983	1230
Talc	14807-96-6	10-30	2.5	not set
Carbon dioxide	124-38-9	3	22500	54000
Other non hazardous ingredients	secret	<5	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.
Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 10 minutes or until chemical is removed. If irritation persists, repeat flushing and obtain medical advice.
Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.
Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.
Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
Extinguishing Media: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.
Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

Flash point:	-20°C
Upper Flammability Limit:	12.8%
Lower Flammability Limit:	2.5%
Autoignition temperature:	No data.
Flammability Class:	Flammable Category 2 (GHS); Highly Flammable (AS1940).

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

WELDING TECHNOLOGY
ENGINEERING EQUIPMENT
Ph: 09 274 1246
info@weldingtechnology.co.nz
www.weldingtechnology.co.nz

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool (below 30°C), well ventilated area. Protect from direct sunlight. Make sure that surrounding electrical devices and switches are suitable. Check containers and valves periodically for leaks. If you keep more than 25kg of flammable gases, you are probably required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	TWA (mg/m^3)	STEL (mg/m^3)
Acetone	1185	2375
Isopropanol	983	1230
Talc	2.5	not set
Carbon dioxide	22500	54000

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: Viton, nitrile, butyl rubber, Teflon, PE/EVAL, Responder.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	White liquid presented as an aerosol.
Odour:	Characteristic odour.
Boiling Point:	Approx 56°C at 100kPa
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	Approx 80%
Vapour Pressure:	No data.
Vapour Density:	No data.
Specific Gravity:	No data.
Water Solubility:	Some, but not all ingredients are soluble.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	No data
Autoignition temp:	No data.

WELDING TECHNOLOGY
SUPPLIERS OF WELDING AND ENGINEERING EQUIPMENT
Ph: 09 274 1246
info@weldingtechnology.co.nz
www.weldingtechnology.co.nz

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to Avoid: Store below 30°C, protect from direct sunlight and do not expose to temperatures exceeding 50°C. Containers should be kept dry. Keep away from sources of sparks or ignition.
Incompatibilities: strong oxidising agents.
Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.
Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Toxicity, Acetone:
LD_{50} Oral, Rat 5800mg/kg
LD_{50} Oral, Mouse = 3000mg/kg
LD_{50} Oral, Rabbit = 5340mg/kg
LD_{50} Dermal, Guinea Pig = >9400mg/kg
In Delayed (Chronic and subchronic) studies, an 8 week inhalation study in rats showed no significant effects at 19,000ppm 5 days/week, and a 90 day oral toxicity in rats showed a no-observed-effects-level of 100mg/kg/day and a low-observed-effects-level of 500mg/kg/day based on increased liver and kidney weights and nephrotoxicity.
Ames Assay (S. typhimmium): Negative
Chromosome Aberrations and Sister Chromatid Exchange Assays: Negative
Point Mutation in Mouse Lymphoma Cells: Negative
DNA Cell-binding Assay: Negative
There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

Ingredient	Risk Phrases
Acetone	Conc>=20%: Xi; R36

Section 12 - Ecological Information

Insufficient data to be sure of status. Expected to not be an environmental hazard.
Acetone:
BOD: 1.22g O2/g (5 days)
Fish: LC_{50} rainbow trout: 5540mg/L LC_{50} bluegill sunfish: 8300mg/L
Daphnia: EC_{50} 10mg/L (24-48 hour)
Bioconcentration factor is 1, suggesting bioconcentration in aquatic organisms is low. This was calculated using an experimental Log Kow value of -0.24
Octanol/water partition coefficient: 0.58

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

UN Number: 1950, AEROSOLS
Hazchem Code: 2YE
Special Provisions: 63, 190, 277
Limited quantities: ADG 7 specifies a Limited Quantity value of 1000mL for this class of product.
Dangerous Goods Class: Class 2.1: Flammable gases.
Packaging Group: Not set
Packaging Method: P003

Class 2.1 Flammable gases shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids) (where both flammable liquids and flammable gases are in bulk), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.2 (Non-flammable Non-Toxic gases), 3 (Flammable liquids except where both flammable liquids and flammable gases are in bulk), 6 (Toxic Substances), 8 (Corrosive Substances) 9 (Miscellaneous dangerous goods), Foodstuffs and foodstuff empties.

WELDING TECHNOLOGY
Ph: 09 274 1246
info@weldingtechnology.co.nz
www.weldingtechnology.co.nz

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.
The following ingredient: Acetone, is mentioned in the SUSMP.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011)

WELDING TECHNOLOGY
SUPPLIERS OF WELDING AND ENGINEERING EQUIPMENT
Ph: 09 274 1246
info@weldingtechnology.co.nz
www.weldingtechnology.co.nz