



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Dinitrol 444 Spray**
Product Use: Paints and varnishes
Restriction of Use: Refer to Section 15

New Zealand Supplier: **Auto Body Equipment**
Address: 17 The Boulevard
Te Rapa, Hamilton, 3200
New Zealand

Telephone: +64 7 849 3514
Email: office@abe.co.nz
Emergency No: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 8 June 2023

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: Aerosols (Flammable) – HSR002515

Pictograms:



Flammable



Irritant



Ecotoxic

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Aerosol Cat. 1	H222	Extremely flammable aerosol.
	H229	Pressurised container: May burst if heated
Eye irritation Cat. 2	H319	Causes serious eye irritation.
specific target organ toxicity - single exposure Cat 3 - Narcotic Effects	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment chronic Cat. 2	H411	Toxic to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Product Name: Dinitrol 444 Spray
Date of SDS: 8 June 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

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

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Dimethyl ether	25 - <50	115-10-6
Acetone; propan-2-one; propanone	20 - <25	67-64-1
Hydrocarbons, C9, aromatics	12.5 - <20	128601-23-0
Zinc powder - zinc dust (stabilized)	5 - <10	7440-66-6
Aluminium powder (stabilised)	2.5 - <5	7429-90-5
Reaction mass of ethylbenzene and xylene	2.5 - <5	Proprietary
Zinc oxide	<0.5	1314-13-2

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.
If on Skin	Wash with plenty of water/Soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
If Swallowed	If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunk in little sips (dilution effect). Call a physician if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms: May cause drowsiness or dizziness. Causes serious eye irritation.

Section 5. Fire Fighting Measures

Hazard Type	Flammable Aerosol
Hazards from decomposition products	Do not inhale explosion and combustion gases. Use appropriate respiratory protection.
Suitable Extinguishing media	Alcohol resistant foam, Carbon dioxide (CO ₂), Extinguishing powder. Water fog. Do not use high power water jet.
Precautions for firefighters and special protective clothing	In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Provide adequate ventilation. Clear contaminated areas thoroughly.

Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Prevent spread over a wide area (e.g. by containment or oil barriers). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Dispose of waste according to the applicable local regulations detailed in Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not spray on an open flame or other ignition source.
- Do not pierce or burn, even after use.
- Heating causes rise in pressure with risk of bursting.
- Avoid breathing fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- If handled uncovered, arrangements with local exhaust ventilation have to be used.
- If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
- Keep away from food, drink and animal feeding stuffs. When using do not eat or drink.
- Avoid contact with skin and eyes.
- Remove contaminated, saturated clothing immediately.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

- Keep in a cool and dry away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Dimethylether	[115-10-6]	400	766	500	958
Acetone	[67-64-1]	500	1185	1000	2375
Aluminium, Metal dust (as Al)	[7429-90-5]	-	10	-	-
Zinc oxide	[1314-13-2]	2	-	5	-
		0.1(r)		0.5(r)	

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

DNEL/DMEL values

CAS No	Substance	DNEL type	Exposure route	Effect	Value
67-64-1	acetone; propan-2-one; propanone	worker DNEL, long-term	inhalation	systemic	1210 mg/m ³
		worker DNEL, acute	inhalation	local	2420 mg/m ³
		worker DNEL, long-term	dermal	systemic	186 mg/kg bw/day
		Consumer DNEL, long-term	inhalation	systemic	200 mg/m ³
		Consumer DNEL, long-term	dermal	systemic	62 mg/kg bw/day
		Consumer DNEL, long-term	oral	systemic	62 mg/kg bw/day
		,			
128601-23-0	Hydrocarbons, C9, aromatics	worker DNEL, long-term	inhalation	systemic	150 mg/m ³
		worker DNEL, long-term	dermal	systemic	25 mg/kg bw/day
		Consumer DNEL, long-term	inhalation	systemic	32 mg/m ³
		Consumer DNEL, long-term	dermal	systemic	11 mg/kg bw/day
		Consumer DNEL, long-term	oral	systemic	11 mg/kg bw/day
		,			
7429-90-5	aluminium powder (stabilised)	worker DNEL, long-term	inhalation	systemic	3,72 mg/m ³
		worker DNEL, long-term	inhalation	local	3,72 mg/m ³
		Consumer DNEL, long-term	oral	systemic	7,9 mg/kg bw/day
		,			
1314-13-2	zinc oxide	worker DNEL, long-term	inhalation	systemic	5 mg/m ³
		worker DNEL, long-term	inhalation	local	0,5 mg/m ³
		worker DNEL, long-term	dermal	systemic	83 mg/kg bw/day
		Consumer DNEL, long-term	inhalation	systemic	2,5 mg/m ³
		Consumer DNEL, long-term	dermal	systemic	83 mg/kg bw/day
		Consumer DNEL, long-term	oral	systemic	0,83 mg/kg

PNEC values

CAS No	Substance	Environmental compartment	Value
67-64-1	acetone; propan-2-one; propanone	Freshwater	10,6 mg/l
		Marine water	1,06 mg/l
		Freshwater sediment	30,4 mg/kg
		Marine sediment	3,04 mg/kg
		Micro-organisms in sewage treatment plants (STP)	100 mg/l
		Soil	29,5 mg/kg
1314-13-2	zinc oxide	Freshwater	0,0206 mg/l
		Marine water	0,0061 mg/l
		Freshwater sediment	117,8 mg/kg
		Marine sediment	56,5 mg/kg
		Micro-organisms in sewage treatment plants (STP)	0,100 mg/l
		Soil	35,6 mg/kg

Engineering Controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Personal Protection Equipment

Eyes	Eye glasses with side protection (EN 166).
Hands	Tested protective gloves must be worn (EN ISO 374): FKM (fluoro rubber), Breakthrough time: 120 min. Butyl caoutchouc (butyl rubber), Breakthrough time: 120 min. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Protective gloves have to be replaced at the first sign of deterioration. Protect skin by using skin protective cream.
Skin	Wear anti-static footwear and clothing.
Respiratory	Work in well-ventilated zones or use proper respiratory protection. gas filtering equipment (EN 141)., Filter material/medium: A/P3

Section 9 Physical and Chemical Properties

Form	Aerosol
Colour	Silver Grey
Odour	Characteristic
Odour Threshold	Not available
pH @20°C	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Flammable Aerosol
Upper and Lower Explosive Limits	0.7 Vol% - 26.2 Vol %
Vapour Pressure @20°C	4000 hPa
Density@ 20°C	0.8 g/cm ³

Specific Gravity	Not available
Water Solubility	The study does not need to be conducted because the substance is known to be insoluble in water.
Partition Coefficient:	Not available
Auto-Ignition Temperature	240°C
Decomposition Temperature	Not available
Kinematic Viscosity @20°C	Not available
Particle Characteristics	Not available
Solvent content	82.8%
Solids content	17.2%

Section 10. Stability and Reactivity

Stability of Substance	The product is stable under storage at normal ambient temperatures.
Possibility of hazardous reactions	No hazardous reaction when handled and stored according to provisions.
Conditions to Avoid	Keep away from heat. Ignition hazard.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Does not contain any ingredients classified as acutely toxic.
Dermal	Does not contain any ingredients classified as acutely toxic. ATE (dermal) 20816,3 mg/kg
Inhalation	Does not contain any ingredients classified as acutely toxic. ATE (inhalation gas) 46836,7 ppm
Eye	Causes serious eye irritation.
Skin	Does not contain any ingredients classified as an skin irritant/corrosive.

Chronic Effects:

Carcinogenicity	Does not contain any ingredients classified as carcinogenic.
Reproductive Toxicity	Does not contain any ingredients classified as toxic for reproduction.
Germ Cell Mutagenicity	Does not contain any ingredients classified as mutagenic.
Aspiration	Does not contain any ingredients classified as Asp Tox.
STOT/SE	Does not contain any ingredients classified as STOT SE.
STOT/RE	May cause drowsiness or dizziness.

Acute Toxicity for components:

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50 5800 mg/kg	Rat	RTECS	
	dermal	LD50 7426-15800 mg/kg	Rabbit	IUCLID	
	inhalation (4 h) vapour	LC50 76 mg/l	Rat		
128601-23-0	Hydrocarbons, C9, aromatics				

	oral	LD50 mg/kg	>6800	Rat		
	dermal	LD50 mg/kg	>2000	Rabbit		
	inhalation (4 h) vapour	LC50	10,2 mg/l	Rat		
7429-90-5	aluminium powder (stabilised)					
	inhalation (4 h) dust/mist	LC50	>5 mg/l	Rat		
reaction mass of ethylbenzene and xylene						
	oral	LD50 mg/kg	3523	Rat		
	dermal	LD50 mg/kg	2000	Rabbit		
	inhalation (4 h) vapour	LC50 mg/l	29000	Rat		
	inhalation gas	ATE ppm	4500			
1314-13-2	zinc oxide					
	oral	LD50 mg/kg	> 7950	Rat		
	inhalation (4 h) dust/mist	LC50 mg/l	> 2500	Rat		

Section 12. Ecotoxicological Information

Toxic to aquatic life with long lasting effects.

Toxicity for components:

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50 mg/l	5540	96 h	Onchorhynchus mykiss	
	Acute crustacea toxicity	EC50 mg/l	8800	48 h	Daphnia Magna	
	Algae toxicity	NOEC mg/l	4740	2 d	Selenastrum capricornutum	
128601-23-0	Hydrocarbons, C9, aromatics					
	Acute fish toxicity	LC50 mg/l	9,2 mg/l	96 h	Onchorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	2,9 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	3,2 mg/l	48 h	Daphnia magna (Big water flea)	
reaction mass of ethylbenzene and xylene						
	Acute fish toxicity	LC50 mg/l	13,5	96 h	fish	
	Acute crustacea toxicity	EC50	7,4 mg/l	48 h	Daphnia magna (Big water flea)	
1314-13-2	zinc oxide					
	Acute fish toxicity	LC50 mg/l	1120	96 h	fish	GESTIS
	Acute crustacea toxicity	EC50 mg/l	12,3	48 h		GESTIS

Persistence and Degradability:

There are no data available on the mixture itself.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
67-64-1	acetone; propan-2-one; propanone				
	OECD 301 B	91%		28	
	Readily biodegradable (according to OECD criteria).				

Bioaccumulative Potential:

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
115-10-6	dimethyl ether	0,1
67-64-1	acetone; propan-2-one; propanone	-0,24

BCF

CAS No	Chemical name	BCF	Species	Source
67-64-1	acetone; propan-2-one; propanone	<10		

Mobility in Soil:

There are no data available on the mixture itself.

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Section 13. Disposal Considerations

Disposal Method:

Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquids or been exposed to significant amounts of gaseous contaminants. Dispose of according to Local Regulations.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – "Flammable Aerosol" and that the label also has the Flammable Pictogram, and the business name, address, and phone number.

Precautions or methods to avoid: Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021



Road, Rail, Sea and Air Transport

UN No	1950
Class - Primary	2
Proper Shipping Name	AEROSOLS, ENVIRONMENTALLY HAZARDOUS
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 1L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

New Zealand:

Product Name: Dinitrol 444 Spray
Date of SDS: 8 June 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: Aerosols (Flammable) – HSR002515

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	3000L (AWC)
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	1000L
Secondary Containment	1000L
Fire Extinguishers	3000L (AWC) - require 1X
Restriction of Use	Only use for the intended purpose.

Section 16	Other Information
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Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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The information herein is given in good faith, but no warranty, express or implied is made.

Please contact Auto Body Equipment, if further information is required.

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