

Dunlop Ready To Go Vinyl Adhesive Ardex (Ardex NZ)

Chemwatch: **25-5541** Version No: **5.1.1.1**

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 1

Issue Date: **01/11/2019**Print Date: **12/08/2020**S.GHS.NZL.EN

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

Product Identifier	
Product name	Dunlop Ready To Go Vinyl Adhesive
Synonyms	Not Available
Proper shipping name	AEROSOLS
Other means of identification	Not Available

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

	Aerosol spray adhesive. NOTE: Although the propellant is classed as flammable, the product as supplied is not (confirmed by laboratory tests)
Relevant identified uses	-due to the presence of water in the formulation. [Dunlop]
	Application is by spray atomisation from a hand held aerosol pack

Details of the supplier of the safety data sheet

Registered company name	Ardex (Ardex NZ)	
Address	32 Lane Street Woolston Christchurch New Zealand	
Telephone	+64 3384 3029	
Fax	+64 3384 9779	
Website	Not Available	
Email	Not Available	

Emergency telephone number

Association / Organisation	Ardex (Ardex NZ)
Emergency telephone numbers	+64 3 373 6900
Other emergency telephone numbers	0800 764 766 (NZ NPC)

SECTION 2 Hazards identification

Classification of the substance or mixture

Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

ChemWatch Hazard Ratings

	Min	Max
Flammability	0	
Toxicity	1	0 = Minimum
Body Contact	1	1 = Low
Reactivity	1	2 = Moderate
Chronic	0	3 = High 4 = Extreme

Classification [1]	Not Applicable
Determined by Chemwatch using GHS/HSNO criteria	Compressed Gas, Dissolved gas, Liquefied gas

Label elements

Hazard pictogram(s)	Not Applicable

Page 2 of 8

Dunlop Ready To Go Vinyl Adhesive

Issue Date: 01/11/2019 Print Date: 12/08/2020

Signal word Not Applicable

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
75-37-6	10-30	1.1-difluoroethane
Not Available	>60	Ingredients determined not to be hazardous

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	If aerosols come in contact with the eyes: Immediately hold the eyelids apart and flush the eye 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.
Skin Contact	Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If solids or aerosol mists are deposited upon the skin: Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.
Inhalation	If aerosols, fumes or combustion products are inhaled: Remove to fresh air. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	Not considered a normal route of entry. If poisoning occurs, contact a doctor or Poisons Information Centre. Avoid giving milk or oils. Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

SMALL FIRE:

Water spray, dry chemical or CO2 LARGE FIRE:

Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility

▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- Fire Fighting
- May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves.
 - ▶ Prevent, by any means available, spillage from entering drains or water course.

Dunlop Ready To Go Vinyl Adhesive

Issue Date: **01/11/2019**Print Date: **12/08/2020**

- Non combustible.
- Not considered to be a significant fire risk.
- ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.

Fire/Explosion Hazard Pacon Across I cans may explode on exposure to naked flames.

Decomposition may produce toxic fumes of:

carbon dioxide (CO2)

hydrogen fluoride

other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses. Shut off all possible sources of ignition and increase ventilation.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can

Conditions for safe storage, including any incompatibilities

Suitable container	 Aerosol dispenser. Check that containers are clearly labelled.
Storage incompatibility	Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
1,1-difluoroethane	Difluoroethane; (1,1-Difluoroethane; HFC 152a)	Not Available	Not Available	Not Available
Ingredient	Original IDLH	Revised IDLH		
1,1-difluoroethane	Not Available	Not Available		

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
1,1-difluoroethane	E	≤ 0.1 ppm
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.	

Exposure controls

	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can
	be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
Appropriate engineering	The basic types of engineering controls are:
controls	Process controls which involve changing the way a job activity or process is done to reduce the risk.
	Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically
	"adds" and "removes" air in the work environment.

Dunlop Ready To Go Vinyl Adhesive

Issue Date: 01/11/2019 Print Date: 12/08/2020

Personal protection No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures: Eye and face protection Safety glasses with side shields. NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. Skin protection ▶ No special equipment needed when handling small quantities. ▶ OTHERWISE: For potentially moderate exposures: Hands/feet protection Wear general protective gloves, eg. light weight rubber gloves. ► For potentially heavy exposures: Wear chemical protective gloves, eg. PVC. and safety footwear. **Body protection** See Other protection below No special equipment needed when handling small quantities. OTHERWISE: Other protection Overalls. Skin cleansing cream. Eyewash unit.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computergenerated selection:

Dunlop Ready To Go Vinyl Adhesive

Material	СРІ
BUTYL	A
NEOPRENE	А
VITON	А
NATURAL RUBBER	С
PVA	С

- * CPI Chemwatch Performance Index
- A: Best Selection
- B: Satisfactory; may degrade after 4 hours continuous immersion
- C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner

Respiratory protection

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	AX-AUS / Class1	-
up to 50	1000	-	AX-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	AX-2
up to 100	10000	-	AX-3
100+			Airline**

- * Continuous Flow ** Continuous-flow or positive pressure demand A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur $\label{eq:conditional} \mbox{dioxide}(SO2), \ G = \mbox{Agricultural chemicals}, \ K = \mbox{Ammonia}(\mbox{NH3}), \ \mbox{Hg} = \mbox{Mercury}, \ \mbox{NO} = \$ Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)
- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties			
Appearance	White pressurized liquid with a sweet odour; mixes with water.		
Physical state	Compressed Gas	Relative density (Water = 1)	1.03
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	5.5-7.5	Decomposition temperature	Not Available

Chemwatch: **25-5541** Page **5** of **8**

Dunlop Ready To Go Vinyl Adhesive

Melting point / freezing point Not Applicable Viscosity (cSt) Not Available (°C) Initial boiling point and boiling Not Applicable Not Applicable Molecular weight (g/mol) range (°C) Flash point (°C) Not Applicable Taste Not Available **Evaporation rate** Not Available Not Available **Explosive properties** Oxidising properties Flammability Not Applicable Not Available Surface Tension (dyn/cm or **Upper Explosive Limit (%)** Not Applicable Not Available mN/m) Lower Explosive Limit (%) Volatile Component (%vol) Not Applicable Not Available Vapour pressure (kPa) Not Available Gas group Not Available Solubility in water Miscible pH as a solution (1%) Not Available

SECTION 10 Stability and reactivity

Vapour density (Air = 1)

Version No: 5.1.1.1

Reactivity	See section 7
Chemical stability	 Elevated temperatures. Presence of open flame. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

VOC g/L

Not Available

Inhalation of toxic gases may cause:

- ▶ Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures;
- respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest;
- heart: collapse, irregular heartbeats and cardiac arrest;
- Inhaled gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain.

Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.

Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and, finally, convulsions, coma and death.

WARNING:Intentional misuse by concentrating/inhaling contents may be lethal.

Ingestion Considered an unlikely route of entry in commercial/industrial environments

A single high oral dose of 1,1-difluoroethane produced weight loss and lethargy

Spray mist may produce discomfort
Open cuts, abraded or irritated skin

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Eye Not considered to be a risk because of the extreme volatility of the gas.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Main route of exposure to the gas in the workplace is by inhalation.

WARNING: Aerosol containers may present pressure related hazards

Dunlop Ready To Go Vinyl Adhesive	TOXICITY	IRRITATION
	Not Available	Not Available
	TOXICITY	IRRITATION
1,1-difluoroethane	Inhalation (mouse) LC50: 488.5 mg/l/2h ^[2]	Not Available
	Oral (rat) LD50: 484 mg/kg ^[2]	
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise	

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

1.1-DIFLUOROFTHANE

Chronic

1,1-difluoroethane is practically non-toxic following acute or chronic inhalation exposure. In animal testing, extremely high concentrations (5% and over) may cause reduced contraction of heart muscle and at even higher levels, heartbeat irregularities. It seems to have a weak effect in damaging genetic material in cells. Studies have not shown it to cause developmental or reproductive toxicity, and it has not been shown to cause mutations.

Acute Toxicity X Carcinogenicity X

Issue Date: 01/11/2019

Print Date: 12/08/2020

Dunlop Ready To Go Vinyl Adhesive

Issue Date: **01/11/2019**Print Date: **12/08/2020**

Skin Irritation/Corrosion	×	Reproductivity
Serious Eye Damage/Irritation	×	STOT - Single Exposure
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure
Mutagenicity	×	Aspiration Hazard

Legend:

X – Data either not available or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Toxicity

Dunlop Ready To Go Vinyl Adhesive	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
1,1-difluoroethane	LC50	96	Fish	48.415mg/L	3
	EC50	48	Crustacea	146.695mg/L	2
	EC50	96	Algae or other aquatic plants	47.755mg/L	2
Legend:	V3.12 (QSAR	n 1. IUCLID Toxicity Data 2. Europe ECHA Regis) - Aquatic Toxicity Data (Estimated) 4. US EPA, I (Japan) - Bioconcentration Data 7. METI (Japan)	Ecotox database - Aquatic Toxicity Data 5. E	, ,	

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
1,1-difluoroethane	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
1,1-difluoroethane	LOW (LogKOW = 0.75)

Mobility in soil

Ingredient	Mobility
1,1-difluoroethane	LOW (KOC = 35.04)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- Consult State Land Waste Management Authority for disposal.
- ▶ Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- DO NOT incinerate or puncture aerosol cans.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Not applicable as substance/ material is non hazardous.

SECTION 14 Transport information

Labels Required



Land transport (UN)

UN number	1950
UN proper shipping name	AEROSOLS

Page 7 of 8 Dunlop Ready To Go Vinyl Adhesive

Issue Date: **01/11/2019**Print Date: **12/08/2020**

Transport hazard class(es)	Class 2.2		
Transport nazaru ciass(es)	Subrisk Not A	applicable	
Packing group	Not Applicable		
Environmental hazard	Not Applicable		
Special precautions for user	Special provision	63; 190; 277; 327; 344; 381	
opecial precautions for user	Limited quantity	1000ml	

Air transport (ICAO-IATA / DGR)

UN number	1950			
UN proper shipping name	Aerosols, non-flammable; Aerosols, non-flammable (containing biological products or a medicinal preparation which will be deteriorated by a heat test)			
Transport hazard class(es)	ICAO/IATA Class	2.2 Not Applicable		
	ERG Code	2L		
Packing group	Not Applicable			
Environmental hazard	Not Applicable			
	Special provisions		A98 A145 A167 A802	
	Cargo Only Packing Instructions		203	
	Cargo Only Maximum Qty / Pack		150 kg	
Special precautions for user	Passenger and Cargo Packing Instructions		203	
	Passenger and Cargo Maximum Qty / Pack		75 kg	
	Passenger and Cargo Limited Quantity Packing Instructions		Y203	
	Passenger and Cargo Limited Maximum Qty / Pack		30 kg G	

Sea transport (IMDG-Code / GGVSee)

• •	•		
UN number	1950		
UN proper shipping name	AEROSOLS		
Transport hazard class(es)		2.2 Not Applicable	
Packing group	Not Applicable		
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number Special provisions Limited Quantities	F-D , S-U 63 190 277 327 344 381 959 1000 ml	

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

Not Applicable

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

HSR Number	Group Standard
Not Applicable	Not Applicable

1,1-difluoroethane 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)

Hazardous Substance Location

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

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
Not Applicable	Not Applicable	Not Applicable

Certified Handler

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

Class of substance	Quantities			

Dunlop Ready To Go Vinyl Adhesive

Issue Date: **01/11/2019**Print Date: **12/08/2020**

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

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National Inventory	Status
Australia - AIIC	Yes
Australia Non-Industrial Use	No (1,1-difluoroethane)
Canada - DSL	Yes
Canada - NDSL	No (1,1-difluoroethane)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - ARIPS	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 Other information

Revision Date	01/11/2019
Initial Date	23/12/2010

SDS Version Summary

Version	Issue Date	Sections Updated
4.1.1.1	08/09/2015	Acute Health (inhaled), Acute Health (skin), Acute Health (swallowed), Advice to Doctor, Appearance, Chronic Health, Fire Fighter (extinguishing media), Fire Fighter (fire/explosion hazard), Fire Fighter (fire fighting), First Aid (swallowed), Ingredients, Personal Protection (Respirator), Personal Protection (eye), Physical Properties, Spills (major), Storage (storage incompatibility), Storage (suitable container)
5.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

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.

Definitions and abbreviations

 ${\sf PC-TWA} : {\sf Permissible\ Concentration-Time\ Weighted\ Average}$

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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