SAFETY DATA SHEET

Section 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**AHD Fade Away Marker Aerosol**
Product Codes:	AH24, AH34, AH44, AH54, AH64
Uses:	A scourable spray for marking sheep / livestock
Company:	Animal Health Direct Ltd
Address:	2 Tumu Way
	Longlands, Hastings 4175
Telephone:	+64 6 873 3611
Email:	sales@ahdltd.co.nz
Emergency Telephone:	**National Poisons Centre:** 0800 764 766 (0800 POISON) 24 hour

Section 2 – HAZARDS IDENTIFICATION

Classification of the product

Considered a hazardous substance according to the Hazardous Substance (Minimum Degrees of Hazard) Regulations NZ.

Classified as a dangerous goods for transport purposes.

GHS Classifications:	**HSNO Classifications:**	
Aerosol Category 1	2.1.2A	Flammable aerosol
STOT (Single exposure) Category 3 (Narcotic)	6.9B	Harmful to human target organs or systems (Narcotic)
Aquatic toxicity (Chronic) Category 2	9.1B	Ecotoxic in the aquatic environment with long lasting effects

Signal Words: Danger

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention)

P103	Read label before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurised container: Do not pierce or burn, even after use. Pressurised container: May burst if heated.
P261	Avoid breathing vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the aquatic environment.

Beware: Deliberately sniffing or inhaling concentrated contents can be harmful or fatal

Precautionary Statements (Response)

P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTRE (0800 764 766) or doctor if you feel unwell.
P391	Collect spillage.

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Section 3 – COMPOSITION INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS No.	Proportion, % m/m
Aliphatic Hydrocarbons (heptanes)	64742-49-0	30 - 60
Acetone	67-64-1	1 - 10
2-Propanol	67-63-0	1 - 10
Hydrocarbon propellant (LPG - Propane, Butane)	.68476-85-7	30 - 60
Non-hazardous ingredients	-	to 100

Section 4 – FIRST AID MEASURES

If medical advice is needed, have product container or label at hand.

If exposed or if you feel unwell: Call a POISON CENTRE (0800 764 766) or doctor.

Inhalation: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.

Skin contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice.

Ingestion: Not considered a normal route of entry. IF SWALLOWED: Call a POISON CENTRE or doctor. Do NOT induce vomiting. Obtain immediate medical attention.

Notes to physician: Treat symptomatically and supportively. No specific antidote.

Section 5 – FIRE-FIGHTING MEASURES

General fire hazards Pressurised, extremely flammable aerosol.

Specific hazards: Containers can build up pressure if exposed to heat and/or fire and may explode. Vapours may form an explosive mixture with air. Vapours can travel to a source of ignition and flash back. May float and be re-ignited on surface water. Will burn if involved in a fire.

Further advice: On burning may emit toxic fumes including those of carbon monoxide and carbon dioxide. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion.

Extinguishing media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

For large fires, use water spray, fog, or foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do not discharge extinguishing waters into the aquatic environment.

Do NOT use straight streams of water.

Protective equipment Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Firefighting instructions In the event of fire, cool containers with water spray to prevent vapour pressure build up. Move containers from fire area if you can do so without risk. Runoff can cause environmental damage.

Hazchem Code: 2YE

Section 6 – ACCIDENTAL RELEASE MEASURES

Minor spills: Clean up all spills immediately. Provide ventilation. Remove all sources of ignition. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.

Major spills: Evacuate the spill area. Call the Fire Brigade. Remove all sources of ignition. If safe to do so, prevent spillage from entering drains or water courses. If material enters drains, advise emergency services. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers for disposal.

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Section 7 – HANDLING AND STORAGE

Handling Precautions: Read product label before use. Keep out of reach of children.

This product is highly flammable. Keep away from heat and open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurised container: Do not pierce or burn, even after use.

Use in a well-ventilated area. Avoid breathing spray. Wash hands with soap and water after handling.

Beware: Deliberately sniffing or inhaling concentrated contents can be harmful or fatal

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Store in a well ventilated, cool, dry place. Keep away from heat, sparks, and flame.

Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: No value assigned for product. Exposure standards for constituents (NZ WES);

Workplace Exposure Standards NZ

Material	TWA, mg/m^3	STEL, mg/m^3	Cat/Notices
Aliphatic Hydrocarbons (heptanes)	1,640	2,050	Not available
Acetone	1,185 (bio)	2,375	(Bio)
2-Propanol	983	1,230	Not available
LPG (butane, propane)	1,800	Not available	Not available

Emergency Limits (TEEL) **Temporary Emergency Exposure Limits**

Material	TEEL-1	TEEL-2	TEEL-3
Aliphatic Hydrocarbons (heptanes)	1,000 mg/m^3	11,000 mg/m^3	66,000 mg/m^3
Acetone	Not available	Not available	Not available
2-Propanol	400 ppm	2,000 ppm	12,000 ppm
LPG (butane, propane)	Not available	Not available	Not available

Emergency Limits (IDLH): **Immediately Dangerous To Life or Health (IDLH) Values**

Material	Original IDLH	Revised IDLH
Aliphatic Hydrocarbons (heptanes)	Not available	Not available
Acetone	2,500 ppm [10% LEL]	Not available
2-Propanol	2,000 ppm [10% LEL]	Not available
LPG (butane, propane)	2,000 ppm [10% LEL]	Not available

Material Data Butane: Odour Threshold Value 2590 ppm (recognition)

Butane in common with other straight chain saturated aliphatic hydrocarbons is not characterised by its toxicity but by its narcosis-inducing effects at high concentrations. It is considered that this limit will protect workers against drowsiness and other narcotic effects.

Butane Odour Safety Factor (OSF) = 0.22

Propane: Odour Safety Factor (OSF) = 0.16

Additional Information: Wash hands before eating, drinking and smoking.

Engineering Controls: No controls required when handling small quantities. Use outdoors or with adequate ventilation.

Larger quantities: General exhaust is adequate under normal operating conditions. Ventilation equipment and lighting should be explosion-resistant.

Protective Equipment: **Eye and face protection:** Safety glasses or goggles.

Skin Protection: No special equipment needed for minor exposure to small quantities. For moderate exposures wear general protective light weight latex gloves. For heavy exposures, wear chemical protective (PVC) and safety boots.

Other Protection: Protective clothing such as overalls, apron and boots are recommended for moderate or heavy use. Operators insulated from earth may develop static charges sufficient to ignite flammable gas/air mixtures. Avoid by wearing low resistivity outer material.

Wash contaminated clothing before reuse.

Respiratory Protection: Where the concentration of gas/particulates in the breathing zone exceeds the "Exposure Standard" (or ES), respiratory protection is required**.**

Use Type AX-P filter (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88)

The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator.

Cartridge performance is affected by humidity. Cartridges should be changed after 2 hours of continuous use unless the humidity is less than 75%, when cartridges can be used for 4 hours. Used cartridges should be discarded daily, regardless of the length of time used.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Coloured liquid spray.
Odour:	Slight hydrocarbon, ketone odour.
Odour Threshold:	Not available.
pH:	Not available.
Melting Point, °C:	Not available.
Freezing Point, °C:	Not available.
Initial Boiling Point, °C:	60 (base liquid)
Boiling Point Range, °C:	60 - 110 (base liquid)
Flash Point, °C:	< 0 (propellant)
Flammability:	Highly flammable.
Explosion Limit, % v/v:	**LEL** 1.0% **UEL** 13.0%
Vapour Pressure, kPa:	300 - 600
Vapour Density (Air = 1):	> 1
Relative Density:	0.80 (base liquid)
Solubility:	Not soluble in water.
Partition Coefficient:	Not available (n-octanol/water)
Autoignition Temp, °C:	Not available.
Decomposition Temp, °C:	Not available.
Kinematic Viscosity, mm^2/s:	Not available.
Particle Characteristics:	Not available.

Section 10 – STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of use. Not reactive. Avoid oxidisers. Avoid elevated temperatures.

Section 11 – TOXICOLOGICAL INFORMATION

Basis for Assessment:	Information given is based on product testing, and/or similar products, and/or components.
Acute Oral Toxicity:	LD_{50} estimated to be > 5,000 mg/kg (based on component mixture, excluding propellant).
Acute Dermal Toxicity:	LD_{50} estimated to be > 5,000 mg/kg (based on component mixture, excluding propellant).
Acute Inhalation Toxicity:	LC_{50} estimated to be > 20 mg/L, Rat 4 hour (based on component mixture).

Inhalation of high concentrations may cause drowsiness or dizziness and lead to central nervous system depression resulting in headaches and nausea.

Beware: Deliberately sniffing or inhaling concentrated contents can be harmful or fatal.

Toxicity of Components:

Material	Toxicity	Irritation
Aliphatic Hydrocarbons (heptanes)	Oral (rat) LD_{50} > 5,840 mg/kg Dermal (rabbit) LD_{50} > 2,920 mg/kg Inhalation (rat) LC_{50} 29.3 mg/L 4 hr	Mild skin irritant.
Acetone	Oral (rat) LD_{50} 3,000 mg/kg Dermal (guinea pig) LD_{50} > 9,400 mg/kg Inhalation (rat) LC_{50} 50 mg/L 4 hr	Not available.
2-Propanol	Oral (rat) LD_{50} 3,600 mg/kg Dermal (rabbit) LD_{50} 12,800 mg/kg Inhalation (rat) LC_{50} > 21 mg/L 4 hr	Mild skin irritant. Eye irritant.
LPG (butane, propane)	Oral (rat) LD_{50} 350 mg/kg Dermal (rabbit) LD_{50} Not available Inhalation (rat) LC_{50} 438 mg/L 4 hr	Not available.

Not Available: Applies to data either not available or does not fill the criteria for classification.

Aspiration Hazard: Not an expected route of exposure.

Skin Irritation: May cause slight skin irritation.

Eye Irritation: May cause eye irritation. Avoid contact with eyes.

Inhalation: May cause drowsiness or dizziness (narcotic).

Respiratory Irritation: Inhalation of vapours or mists may cause irritation to the respiratory system.

Sensitisation: Not expected to be a contact or respiratory sensitiser.

Mutagenicity: Not expected to be mutagenic.

Carcinogenicity: Not expected to be carcinogenic.

Reproductive toxicity: Not expected to be toxic.

Specific Target Organ Toxicity: Not expected to be harmful to human target organs or systems.

STOT (Narcotic): Prolonged inhalation of vapours may cause drowsiness or dizziness (narcotic).

Repeated Dose Toxicity: Exposure by inhalation not expected to cause damage to organs.

Additional Information: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

Section 12 – ECOTOXICITY INFORMATION

Ecotoxicity: Product is expected to be ecotoxic in the aquatic environment.

Mobility: Not available.

Persistence/degradability: More volatile components are expected to degrade in air. Not expected to bioaccumulate.

Section 13 – DISPOSAL CONSIDERATIONS

Material Disposal: Product wastes are ecotoxic and should be disposed of in accordance with applicable regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.

Large quantities should be degassed by an aerosol recycler. Do not dispose of large quantities of pressurised aerosols in landfills. Incineration in an authorised facility is suggested.

Container Disposal: Recycle empty container if possible or dispose in landfill. Product containers are also considered wastes of the same class of the contents and should be disposed of in accordance with applicable regulations.

If it is a class 6, 8 or 9 it must be disposed by treating it so it is no longer a hazardous substance. If it contains components that are bioaccumulative and not rapidly degradable, it must be treated so that the substance is no longer a hazardous substance.

Container Recycling: Recyclable metal - Recycle if possible. Packages which hazardous content have been appropriately treated to remove residual contents may be recycled.

Workplace: Send empty cans to a metal recycler, approved aerosol recycler or commercial waste stream.
Consumer: Recycle if possible or place empty can in normal household waste stream.

Section 14 – TRANSPORT INFORMATION

Transport: Classified as a Dangerous Good for transport purposes.

Class 2.1 should not be loaded on the same vehicle as Classes 1, 3 (where both are in bulk), 4, 5, and 7. They may be loaded with Classes 3, 6, 8, 9, foodstuffs and foodstuff empties.

Proper Shipping Name: Aerosols

UN Number: 1950

Dangerous Goods Class: 2.1

Subsidiary Risk: Not applicable

Packing Group: Not applicable

Transport Labels Required: Class 2 Flammable (Land, Sea and Air), EHSM (Sea and Air)

Land, Sea, Air	Sea, Air
	

Marine Pollutant: Yes

EMS Number F-D, S-U (UN 1950 Flammable aerosols)

DG Segregation: This product is classified as a Dangerous Goods. Please consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.

Section 15 – REGULATORY INFORMATION

EPA Approval Number: HSR002515 Aerosols (Flammable) Group Standard 2020

EPA Hsno Controls: Refer to www.epa.govt.nz for information on Controls.
This substance is to be managed using the conditions specified in an applicable Group Standard.

Inventory Listing NZIOC **(**New Zealand Inventory of Chemicals); All components of this product are listed.

SDS regulations This Safety Data Sheet was prepared in accordance with the EPA Hazardous Substances (Safety Data Sheets) Notice July 2017 (Consolidated 30 September 2022).

Section 16 – OTHER INFORMATION

Additional information For further copies of this sheet or other product information contact AHD Ltd.

Reason for Issue: GHS format update.

Personal Protective Equipment Guidelines: The recommendation for protective equipment contained is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

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Health Effects from Exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since AHD Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact their AHD representative or AHD Ltd at the contact details on page 1. AHD Ltd responsibility for the material as sold is subject to the terms and conditions of sale.

Abbreviations

CAS	Chemical Abstract Service number
EMS	Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA	Environmental Protection Agency
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC_{50}	Lethal Concentration, 50% / Median Lethal Concentration
LD_{50}	Lethal Dose, 50% / Median Lethal Dose
LEL	Lower Explosion Limit
mg/m^3	Milligrams per Cubic Metre
NZIoC	New Zealand Inventory of Chemicals
N.O.S.	Not otherwise specified
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
TLV	Threshold Limit Value
TWA	Time Weighted Average
UEL	Upper Explosion Limit

DISCLAIMER

The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material. The information is provided in good faith based on current knowledge and experience. No warranty with regard to the product properties is expressed or implied.

End of sds.