



Atorn Ice Spray Rust Loosener 400ML

Safety Data Sheet

1. Identification of Substance & Company

Product	
Product name	Atorn Ice Spray Rust Loosener 400ML
Other names	Rost off Ice
Product code	6081520009
HSNO approval	Aerosols (Flammable) Group Standard 2006, HSR002515
UN number	1950
Proper Shipping Name	AEROSOLS (naphtha (petroleum), hydrotreated light)
DG class	2.1
Packaging group	NA (Aerosol)
Hazchem code	1T
Poison schedule	Not allocated
Uses	Rust remover
Company Details	
Company	EDL Fasteners LTD
Address	70 Richard Pearse Drive Mangere, Manukau New Zealand
Telephone	+64 9 257 5536
Fax	+64 9 257 5844
Website	www.edlfast.co.nz

Emergency Telephone Number: 0800-764 766

2. Hazard Identification

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (Aerosols (Flammable) Group Standard 2006, Approval HSR002515), and is classified as follows:

Classes	Hazard statement
2.1.2A	Extremely flammable aerosol.
	Pressurised container: May burst if heated.
6.3B	Causes mild skin irritation.
6.9 (narcotic)	May cause drowsiness or dizziness.
9.1C	Harmful to aquatic life with long lasting effects.

SYMBOLS

DANGER



Other Classifications

There are no other classifications that are known to apply.

Precautionary Statements

- Read label before use.
- Keep out of reach of children.
- Keep away from sparks/open flames/hot surfaces. No smoking.
- Do not spray on an open flame or other ignition source.
- Pressurized container: Do not pierce or burn, even after use.
- Wash hands thoroughly after handling.
- Wear protective gloves/protective clothing. Wear eye/face protection.
- Do not breathe spray.
- Use only outdoors or in a well-ventilated area.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.



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Further precautionary statements can be found in Section 4 – First Aid.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (% w/w)
isobutane	75-28-5	>55-60%
Hydrocarbons, C6-C7, isoalkanes, <5% n-hexane	EC no: 921-024-6	>7- 10%
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic	EC no: 927-510-4	>7-10%
propane	74-98-6	>7-10%
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, <2% aromatics	EC no: 927-241-2	>3-5%
butane	106-97-8	>2-3%
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	EC no: 920-107-4	>2-3%
hexane	110-54-3	>0.3-0.5%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been harmed, or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

If medical advice is needed, have this SDS, product container or label at hand. . If exposed or concerned: Get medical advice/attention.

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is recommended.

Exposure

Swallowed IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Contact a doctor if you feel unwell.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If symptoms persist, seek medical advice.

Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.

Inhaled IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards: This product is a flammable aerosol. This product has the potential to cause fire or to create an additional hazard during fire.

Suitable extinguishing substances: Carbon Dioxide, Water jet spray, Chemical powder, foam.

Unsuitable extinguishing substances: High volume water jet.

Products of combustion: Product may decompose in a fire and produce toxic or corrosive fumes. Hazardous decomposition products include carbon oxides, hydrocarbons, toxic pyrolysis products
Protective equipment: Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.

Hazchem code: 1T (recommended)

6. Accidental Release Measures

Containment	If greater than 3000L is stored, secondary containment and emergency plans to manage any potential spills must be in place. Prevent product from entering environment.
Emergency procedures	In the event of a large spillage alert the fire brigade to location and give brief description of hazard. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain spill. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses.
Clean-up method	If spray or gas escapes, increase ventilation. Collect product and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapour. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Store in original container. Aerosol is pressurized. Keep away from heat. Keep away from direct sunlight. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep containers tightly closed in a cool, well-ventilated place.
Handling	Avoid contact with incompatible substances as listed in Section 10. Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2013)	Ingredient	WES-TWA	WES-STEL
	Hydrocarbons (as white spirits)	100ppm, 525mg/m ³	No data
	Butane	800ppm 1900mg/m ³	No data
	Isobutane	800ppm 1900mg/m ³	No data
	Propane	simple asphyxiant (ACGIH: 1000ppm)	No data
	n-Hexane	20ppm, 72mg/m ³	No data

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes



To protect eyes, it is recommended that goggles, safety glasses or full face mask be worn. Avoid wearing contact lenses.



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Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves, e.g. nitrile rubber, NBR gloves. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.

Respiratory

A respirator with an organic vapour cartridge when airborne concentrations approach the WES (section 8) should be used. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

No additional information

9. Physical & Chemical Properties

Appearance	aerosol, light brown liquid, with isobutene, butane and propane as propellants.
Odour	hydrocarbon odour
pH	no data
Vapour pressure	no data
Viscosity	no data
Boiling point	-40°C
Volatile materials	no data
Freezing / melting point	not reported
Solubility	insoluble in water
Specific gravity / density	0.738 g/cm ³
Flash point	no data
Danger of explosion	extremely flammable aerosol. Pressurised container. May burst if heated.
Auto-ignition temperature	~200°C
Upper and lower flammable limits	LEL = 1 Vol %, UEL = 11 Vol %
Corrosiveness	not corrosive

10. Stability & Reactivity

Stability	This product is thermally stable when stored and used as directed. Vapours may form explosive mixtures with air. Pressurised container: may burst if heated.
Conditions to be avoided	Open flames, heat ignition sources.
Incompatible groups	Strong oxidising agents.
Hazardous decomposition products	None known.
Hazardous reactions	Heating aerosol can result in increase pressure and possible danger of explosion.

11. Toxicological Information

Summary

IF SWALLOWED: the liquid contained in the aerosol may be aspirated into the lungs with the risk of chemical pneumonitis, which may be fatal. Ingestion may also be irritating to the gastrointestinal tract. Swallowing large amounts may affect nervous system (nausea, narcosis, dizziness, convulsions etc). This mixture is not classed as 6.1E (aspiration) because it is in the form of an aerosol

IF ON SKIN: may result in mild irritation and drying (defatting) of the skin with resultant non-allergic dermatitis.

IF INHALED: may result in irritation of the respiratory system and may cause dizziness and drowsiness (similar symptoms as if swallowed)

CHRONIC TOXICITY: Prolonged exposure to hydrocarbons can cause nerve damage (CNS) and affect the liver, kidneys and blood. Prolonged exposure to n-hexane can affect the peripheral nervous system.

Supporting Data

Acute	Oral	No data for mixture is available. Using the LD ₅₀ 's for the ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >5000mg/kg. Data considered includes: Hydrocarbon, alkanes, isoalkanes, cyclics >5000mg/kg (rat), n-Hexane: 16g/kg (rat). However the solvent is considered an acute oral toxicant by aspiration.
	Dermal	No data for mixture is available. Using LD ₅₀ 's for ingredients, the estimated LD ₅₀ (dermal,



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		rat) for the mixture is >5,000 mg/kg. Hydrocarbon, alkanes, isoalkanes, cyclic: LD ₅₀ >2000mg/kg (rabbit).
	Inhaled	No data for mixture is available. Inhalation may cause drowsiness or dizziness. Using LC ₅₀ 's for ingredients, the estimated LC ₅₀ (inhalation, rat) for the mixture is >5,000 ppm. Data available includes: Hydrocarbon, alkanes, isoalkanes, cyclics >20mg/L (rat), Naptha (petroleum) hydrotreated heavy >12mg/L (rat).
	Eye	The mixture is not considered to be an eye irritant.
	Skin	The mixture is considered to be a skin irritant. the hydrocarbon solvent is considered a skin irritant. Repeated exposure may cause skin dryness or cracking.
Chronic	Sensitisation	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	Hydrocarbon solvents are considered carcinogenic by some agencies (based on possible aromatic hydrocarbon concentration), however hydrotreated hydrocarbons are not listed by IARC and not classified by EPA as carcinogenic. Some hydrocarbon solvents are considered carcinogenic – particularly those that contain aromatic compounds (benzene). Benzene content is <0.1%.
	Reproductive / Developmental	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	Inhalation may result in headaches, Dizziness, nausea, effects/damages to the central nervous system, narcotic effect and unconsciousness. Chronic overexposure to aliphatic hydrocarbons can cause loss of coordination, reduction in reaction times and central and peripheral nervous system damage (n-Hexane).
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This substance is considered harmful to the aquatic environment with long lasting effect. Do not discharge this material into waterways, drain and sewers.

Supporting Data

Aquatic

Using EC₅₀'s for ingredients, the calculated EC₅₀ for the mixture is between 1 and 100 mg/L and none of the components are considered bioaccumulative or persistent in the aquatic environment. Data considered includes:
 isobutane No known ecological damage is caused by this substance,
 Hydrocarbons, C6, isoalkanes, <5% n-hexane >1mg/L (48h, Organe-red killifish), 2.1mg/L (48h, Daphnia magna),
 Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic >13.4mg/L (96h, rainbow trout), 3mg/L (48hr, Daphnia magna), 10-30mg/L (72h, green algae), NOEC: 10mg/L (72h, green algae), NOEC 0.17mg/L (21d, Daphnia magna), biodegradable,
 propane No known ecological damage is caused by this substance. ,
 Hydrocarbons, C9-C10, n-alkanes, isoalkanes, <2% aromatics harmful to aquatic organisms, may cause long term effects in the aquatic environment, not readily biodegradable,
 butane No known ecological damage is caused by this substance. ,
 Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics >1000mg/L (96h, rainbow trout), >1000mg/kg (48h, Daphnia magna), >1000mg/L (72h, microalgae), n-Hexane 2.50mg/L (96hr, Fathead minnow), 3.9mg/L)48hr, Daphnia magna), bioaccumulative, 0 0

Bioaccumulation

Not rapidly biodegradable.

Degradability

Not applicable.

Soil

No data available for the mixture.

Terrestrial vertebrate

This product is not considered harmful to terrestrial vertebrates. No LC₅₀ (diet) data for ingredients are available and the classification is based on the LD₅₀ (oral) – see section 11 – oral toxicity.

Terrestrial invertebrate

The mixture is not considered harmful to terrestrial invertebrates.

Biocidal

Not applicable



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13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Send empty aerosol can to landfill or similar. Do not puncture or incinerate.

14. Transport Information

New Zealand Land Transport:

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangerous good for transport.

UN number:	1950	Proper shipping name:	AEROSOLS
Class(es):	2.1	Packing group:	Not applicable
Precautions:	Flammable aerosol,	Hazchem code:	1T

IMDG:			
UN number:	1950	Proper shipping name:	AEROSOLS
Class(es)	2.1	Packing group:	Not applicable
Precautions:	Flammable aerosol,	EMS:	F-D, S-U

IATA:			
UN number:	1950	Proper shipping name:	AEROSOLS
Class(es)	2.1	Packing group:	Not applicable
Precautions:	Flammable aerosol	Guide number:	203

15. Regulatory Information

This product has been transferred to HSNO (Group standards), EPA approval code:, Aerosols (Flammable) Group Standard 2006, HSR002515)

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing >10L.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 3000L is stored.
Approved handler	Required if > 3000L is handled or stored. (Flammable aerosol)
Tracking	Not required.
Bundling and secondary containment	Required if > 3000L is stored.
Signage	Required if > 3000L is stored in any one location.
Location Test certificate	Required if > 3000L is stored in any one location.
Flammable zone	Must be established if > 3000L is stored in any one location.
Fire extinguisher	If > 3000L present.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.



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16. Other Information

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
Approval Code	EPA approval code:, Aerosols (Flammable) Group Standard 2006, HSR002515) Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority (now EPA)
EPA	Environmental Protection Agency (previously known as ERMA)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
EPA Transfer Gazettes Controls Matrix	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004) Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2013	The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
Other References:	Suppliers SDS

Review

Date	Reason for review
January 2010	Not applicable – new SDS
November 2015	update: ERMA to EPA, OSH to Worksafe NZ, update of section 11 and 12, review of classification. Transport section.

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

