

SAFETY DATA SHEET (SDS)

PRODUCT NAME : COOLANT - EDWARDS DRYSTAR 2

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product name: Edwards Drystar 2 Coolant
Other means of identification: None
Item numbers: H128-10-003, H128-10-004

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

Identified uses: Water conditioning agent for professional users.
Uses advised against: Not available

1.3 Details of the supplier of the safety data sheet

UK contact details

Edwards, Innovation Drive, Burgess Hill, West Sussex,
RH15 9TW, United Kingdom

General enquiries

Tel: +44 (0)8459 212223

Email: info@edwardsvacuum.com

US contact details

Edwards, 6416 Inducon Drive West, Sanborn,
New York, 14132, USA

General enquiries

Toll Free: 1-800-848-9800

1.4 Emergency telephone number

Chemtrec: 1-800-424-9300

2. Hazards Identification

2.1 Classification of the substance or mixture

GHS classification: Mixture
Classification according to
Regulation (EC) No. 1272/2008: Not classified
Classification according to
Directive 1999/45/EC: Not classified

2.2 Label elements

Hazard pictograms: Not applicable
Signal words: Not applicable
Hazard statements: Not applicable
Precautionary statements: Not applicable
S-phrases(s): S37 - Wear suitable gloves

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2.3 Other hazards

PBT criteria: Not applicable

vPvB criteria: Not applicable

Other hazards which do not result in a classification: Not applicable

3. Composition/Information on Ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase / Hazard Statements*
Propylene glycol	75 to < 90	57-55-6	Not applicable	Not applicable

*Hazard class, Risk phrase and Hazard Statements. These columns are only completed for ingredients which are classified as hazardous under EU Directive No 1272/2008 (as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

Full text for the declared risk phrases and hazards statements is given in Section 16.

4. First Aid Measures

4.1 Description of first aid measures

Eyes: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Seek medical attention if symptoms persist.

Skin: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Seek medical attention if symptoms occur.

Ingestion/Oral: Wash out mouth with water. Remove the affected person to fresh air and keep at rest in a comfortable breathing position. If coolant has been swallowed and the exposed person is conscious, give small quantities of water to drink. DO NOT induce vomiting. Seek medical attention if symptoms occur.

Inhalation: Remove the affected person to fresh air and keep at rest in a comfortable breathing position. Seek medical attention if symptoms occur.

General advice: None.

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4.2 Most important symptoms and effect, both acute and delayed

Potential acute health effects:

Eyes: No known significant effects or critical hazards.

Skin: No known significant effects or critical hazards.

Ingestion / Oral: No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

Over-exposure symptoms:

Eyes: Not available.

Skin: Not available.

Ingestion / Oral: Not available.

Inhalation: Not available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Fire and explosion hazard: In a fire or if heated, a pressure increase will occur and coolant containers may burst. Isolate the scene by removing all persons from the vicinity of the fire.

Hazardous combustion products: Decomposition products may include carbon dioxide and carbon monoxide.

5.3 Advice for fire-fighters

Special precautions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters: Firefighters should wear appropriate protective equipment and Self-Contained Breathing Apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European Standard EN 469 will provide a basic level of protection for chemical incidents.

For Flammability Properties - see Section 9.

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6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled coolant. Put on appropriate personal protective equipment (refer to Section 8)

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials and additional information on hygiene measures.

6.2 Environmental precautions:

Avoid dispersal of spilt coolant and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Put on the necessary personal protective clothing: refer to Section 8. Exercise caution; the area of the spill area may be slippery.

Large spills

Stop the leak if you can do so without risk. Move containers from the spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant, or contain and collect spillage with non-combustible, absorbent material (for example sand, earth, vermiculite or diatomaceous earth) and place in container(s). Dispose of as described in Section 13.

Small spills

Stop the leak if you can do so without risk. Move containers from the spill area. Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of as described in Section 13.

6.4 Reference to other sections

Refer to Section 8 for information on personal protective equipment.

Refer to Section 13 for information on disposal considerations.

7. Handling and Storage

7.1 Precautions for safe handling

Ensure Personal Protective Equipment is used whenever handling the product, refer to Section 8. Avoid eating, drinking and smoking in areas where the product is used. Practice good hygiene. Wash hands after use and prior to consuming food and drink. Remove contaminated clothing and personal protective equipment before entering eating areas.

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7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in the original container or an approved alternative made from a compatible material. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Keep containers tightly closed when not in use. Carefully reseal opened containers and keep them upright to prevent leakage.

7.3 Specific end use(s)

Not available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredient	ACGIH - TLV	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
Propylene glycol	None established	None established	10 mg/m ³ - 8 hr TWA (particulate) 474 mg/m ³ - 8 hr TWA (vapours and particulate) 150 ppm - 8 hr TWA (vapours and particulate)

8.2 Exposure controls

Appropriate engineering controls: No special ventilation is required. Good general ventilation should be sufficient to control worker exposure to airborne vapours. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below the recommended/statutory limits.
Ensure that eyewash stations and safety showers are available, close to the workstation location.

Individual protection measures:

Eye/Face Protection: Wear safety glasses with side-shields to EN 166 1F, or other safety eyewear complying with an approved standard, to avoid exposure to liquid splashes, mists or vapours.

Hand/Skin Protection: Wear chemical-resistant, impervious gloves complying with an approved standard. 4 - 8 hours (breakthrough time): nitrile rubber.

Respiratory Protection: None required for normal use.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before re-use. Thoroughly clean contaminated footwear before re-use.

Other/General Protection: Wear an overall and appropriate footwear, that comply with an approved standard.

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Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Green liquid	Melting point / freezing point	Not available	°C / °F
Odour	Characteristic	Initial boiling point and boiling range	130 / 266	°C / °F
Odour threshold	Not available	Flash point	Not applicable	°C / °F
pH	7 to 8 [Conc. (% w/w): 100%]	Upper/lower flammability or explosive limits	Not available	°C / °F
Evaporation rate	Not available	Vapour pressure	Not available	hPa
Flammability (solid, gas)	Not available	Vapour density	Not available	g/cm ³
Solubility(ies)	Easy soluble in hot and cold water	Relative density	1.047	g/cm ³
Partition coefficient: n-octanol/water	Not available	Auto-ignition temperature	Not available	°C / °F
Explosive properties	Not available	Decomposition temperature	Not available	°C / °F
Oxidising properties	Not available	Viscosity	Not available	cSt

9.2 Other information

Not applicable.

10. Stability and Reactivity

10.1 Reactivity

Not available.

10.2 Chemical stability

Stable under normal conditions of use.

10.3 Possibility of hazardous reactions

None under normal conditions of use.

10.4 Conditions to avoid

Not available.

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10.5 Incompatible materials

Not available.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:	Not available.
Irritation:	Not available.
Corrosivity:	Not available.
Sensitisation:	Not available.
Repeat dose toxicity:	Not available.
Carcinogenicity:	Not available.
Mutagenicity:	Not available.
Specific Target Organ Toxicity (STOT) - single exposure:	Not available.
STOT - repeated exposure:	Not available.
Aspiration hazard:	Not available.
Toxicity for reproduction:	Not available.

Information on likely routes of exposure

Not available.

Symptoms related to the physical, chemical and toxicological characteristics

Eye Effects:	Not available.
Skin Effects:	Not available.
Ingestion / Oral Effects:	Not available.
Inhalation Effects:	Not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Not available.

Other information

Not available.

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12. Ecological Information

There are no known incidents of ecological damage, nor would be this be expected in normal use.

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No known adverse effects.

13. Disposal Considerations

The product is classified as hazardous waste with a European Waste Catalogue (EWC) number of 16 03 06.

13.1 Waste treatment methods

- Product: Avoid/minimise the generation of waste coolant wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.
Dispose of surplus and non-recyclable coolant using a licensed waste disposal contractor.
Dispose of the coolant in compliance with all applicable environmental protection and waste disposal legislation, and with any regional local authority requirements.
- Packaging: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

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14. Transport Information

14.1 UN number

ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.2 UN proper shipping name

ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.3 Transport hazard class

ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.4 Packing group

ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.5 Environmental hazards

ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.6 Special precautions for user

ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable.

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15. Regulatory Information

15.1 Safety, health and environment regulations/legislation specific for the substance or mixture

European

This product has been classified in accordance with EU Regulation No 1907/2006 (REACH) on the Classification, Labelling and Packaging of Substances and Mixtures.

Classified as dangerous to supply: No.

German Federal Water Management Act: Water contaminating class - WGK 1

United States

All materials contained in this product are on the U.S. Toxic Substances Control Act (TSCA).

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

Canadian

WHMIS Classification: Not applicable.

All ingredients in this product are included in the Canadian DSL.

15.2 Chemical safety assessment

Not available.

16. Other Information

This SDS is compiled in accordance with ANSI Z400.1, Regulation (EC) No 1907/2006 (as amended by Regulation No 453/2010) concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

16.1 Full text of abbreviated statements and phrases

S-phrases(s) S37 - Wear suitable gloves

16.2 NFPA / HMIS hazard codes

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	Not available	Health	Not available	0 = No Hazard
Flammability	Not available	Flammability	Not available	1 = Slight Hazard
Instability	Not available	Reactivity	Not available	2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe Hazard

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16.3 Sources of information for this data sheet

- Alpha Alent plc "Drystar 2 0.9 Ltr" Safety Data Sheet, Version 1, Date of Issue: 17/04/2013.

16.4 Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ANSI - American National Standards Institute; Canadian TDG - Canadian Transportation of Dangerous Goods; CAS - Chemical Abstracts Service; Chemtrec - Chemical Transportation Emergency Center (US); DSL - Domestic Substances List; EC - Effective Concentration; EH40 (UK) - HSE Guidance Note EH40 Occupational exposure limits; EPCRA - Emergency Planning and Community Right-to-Know Act; GHS - Globally Harmonized System of Classification and Labelling of Chemicals; HMIS - Hazardous Material Information Service; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OSHA - Occupational Safety and Health Administration, US department of Labour; PBT - Persistent, Bioaccumulative and Toxic; vPvB - Very Persistent, Very Bioaccumulative; PEL - Permissible exposure limit; RID - European Agreement concerning the International Carriage of Dangerous Goods by Rail; SARA (Title III) - Superfund Amendments and Reauthorization Act; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self-Contained Breathing Apparatus; STEL - Short Term Exposure Limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-Weighted Average; US DOT - US Department of Transportation; WHMIS - Workplace Hazardous Materials Information System.

16.5 Revisions:

June 2010 - Data Sheet updated to reflect the latest regulatory information.

November 2011 - Data Sheet updated to reflect the latest supplier safety information.

November 2012 - European and US Contact Details updated.

July 2013 - Data Sheet updated to conform to Regulation (EC) No 1907/2006 (as amended by Regulation 453/2010) and GHS.

December 2013 - Global formatting changes.

January 2016 - Contact details updated. Revision date not changed to preserve 2-yearly SDS review date.

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