

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: Dryocel® 848 / 848-S

Other means of identification
None.

Recommended restrictions

Recommended use: For industrial use
Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
2 Turner Place
Piscataway, NJ 08854
USA

Telephone : +1 732 981 5000

E-mail : product-regulatory-services@evonik.com

Initial Supplier Identifier
Données relatives au fournisseur

Univar Solutions Canada Ltd.

64 Arrow Road
North York, ON M9M 2L9
Telephone: 1-866-686-4827

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification
Not classified

Label Elements

Hazard Symbol: No symbol
Signal Word: No signal word.
Hazard Statement: Not applicable

Precautionary Statements

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Aluminium oxide		1344-28-1	80 - 100%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General information:	No specific first aid measures noted.
Inhalation:	Move to fresh air. In case product dust is released: Possible discomfort: cough, sneezing
Skin Contact:	Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.
Eye contact:	Rinse thoroughly with plenty of water keeping eyelid open. Remove contact lenses if this can be easily done. Get medical attention if any discomfort continues.
Ingestion:	Clean mouth with water and drink afterwards plenty of water. Get medical attention if any discomfort continues.
Personal Protection for First-aid Responders:	Pay attention to self-protection.

Most important symptoms and effects, both acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	No data available.
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5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water, water vapour, extinguishing powder, extinguishing foam Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture:

Hazard-determining flue gases might develop in case of fire: Carbon Monoxide. Carbon Dioxide.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:

Water used to extinguish fire should not enter drainage systems, soil or stretches of water.

Special protective equipment for fire-fighters:

In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid contact with eyes, skin, and clothing.

Accidental release measures:

No data available.

Methods and material for containment and cleaning up:

Use mechanical handling equipment. Avoid dust formation. Clean contaminated surface thoroughly. Send in suitable containers for recovery or disposal. Disposal according to local authority regulations.

Environmental Precautions:

Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

7. Handling and storage

Handling

Technical measures:

No data available.

Local/Total ventilation:

Provide adequate ventilation.

Safe handling advice:

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment. Avoid inhalation of dust and contact with skin and eyes. Handle and open container with care.

Contact avoidance measures:

No data available.

Storage

Safe storage conditions:

Store in accordance with local/regional/national/international regulations. Normal measures for preventive fire protection. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Take precautionary measures against static discharges.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values		Source
Aluminium oxide - Respirable fraction.	TWA		1 mg/m ³	ACGIH (03 2016)
	PEL		5 mg/m ³	OSHA Z1 (03 2016)
Aluminium oxide - Total dust.	PEL		15 mg/m ³	OSHA Z1 (03 2016)
Aluminium oxide - Respirable fraction.	TWA		15 millions of particles per cubic foot of air	Z3 (03 2016)
	TWA		5 mg/m ³	Z3 (03 2016)
Aluminium oxide - Total dust.	TWA		15 mg/m ³	Z3 (03 2016)
	TWA		50 millions of particles per cubic foot of air	Z3 (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection:

close-fitting protective goggles (e.g. closed goggles)

Skin Protection

Hand Protection:

Additional Information: No protective glove type has been specified for use with this product. Additional Information: Selection of protective gloves to meet the requirements of specific workplaces., The suitability for a specific workplace should be discussed with the producers of the protective gloves., Be aware that in daily use the durability of a protective glove can be notably shorter than the break through time measured, due to the numerous outside influences (e.g. temperature)., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and Body Protection:

Wear suitable protective clothing. If necessary, full body protection suit (coverall). Select materials and equipment for physical protection depending on the concentration and volume of hazardous substances and the workplace involved.

Respiratory Protection:

In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter or wear a self contained respiratory apparatus Ambient air dependent respiratory protective devices must be tested for their suitability prior to use (e.g. contact manufacturer, carry out penetration test). Note time limit for wearing respiratory protective equipment.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid dust formation. Avoid contact with eyes, skin, and clothing. Immediately remove contaminated clothing. Wash contact areas after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using the product. Implement skin protection measures according to skin protection schedule

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: solid

Form: solid

Color: White

Odor: Odorless

Odor Threshold: No data available.

Melting Point: 3,722 °F/ 2,050 °C

Boiling Point: No data available.

Flammability: No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper: No data available.

Explosive limit - lower: No data available.

Flash Point: Not applicable (solid)

Auto-ignition temperature: No data available.

Decomposition Temperature: No data available.

pH: No data available.

Viscosity

Dynamic viscosity: No data available.

Kinematic viscosity: No data available.

Flow Time: No data available.

Solubility(ies)

Solubility in Water: Insoluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Vapor pressure: No data available.

Relative density: No data available.

Density: 0.6 g/cm³ at 68 °F/20 °C

Bulk density: No data available.

Vapor density (air=1): No data available.

Other information

Oxidizing properties:	The substance or mixture is not classified as oxidizing.
Self-ignition:	Based on available data, the classification criteria are not met.
Formation of Flammable Gases:	Based on available data, the classification criteria are not met.
Peroxides:	The substance or mixture is not classified as organic peroxide.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No further information available
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product:	Not classified for acute toxicity based on available data.
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Dermal

Product:	Not classified for acute toxicity based on available data.
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Inhalation

Product:	Not classified for acute toxicity based on available data.
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Repeated dose toxicity

Product:	No data available.
Components:	
Aluminium oxide	NOAEL Rat, Female, Male, Oral, 90 d, daily, 1,000 mg/kg, LOAEL Rat, Female, Male, Oral, 90 d, daily, 1,000 mg/kg, (analogy) NOAEC, Rat, Inhalation - dust and mist, 90 d, 5 days/weeks, 6 hours/day, 70 mg/m ³ , Target Organ(s): lungs / sediments in the lungs, lungs / no evidence of fibrosis, no pathological changes

Skin Corrosion/Irritation

Product:	No data available.
Components:	
Aluminium oxide	Not irritating, OECD 404, Rabbit

Serious Eye Damage/Eye Irritation

Product: No data available.
Components:
Aluminium oxide Not irritating, OECD 405, Rabbit

Respiratory or Skin Sensitization

Product: No data available.
Components:
Aluminium oxide Draize-test, Guinea Pig, Not a skin sensitizer.
Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer.

Carcinogenicity

Product: No data available.
Components:
Aluminium oxide No evidence that cancer may be caused.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product: No data available.
Components:
Aluminium oxide gene mutation test, OECD 471: , negative
gene mutation test, OECD 476: , negative, (analogy)

In vivo

Product: No data available.
Components:
Aluminium oxide Micronucleus test, OECD 474, Oral, Rat, Male, negative, (analogy)

Reproductive toxicity

Product: No data available.
Components:
Aluminium oxide no evidence of reproductiontoxic properties

Specific Target Organ Toxicity - Single Exposure

Product: No data available.
Components:
Aluminium oxide no evidence for hazardous properties

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.
Components:
Aluminium oxide no evidence for hazardous properties

Aspiration Hazard

Product: No data available.
Components:

Aluminium oxide Not applicable

Information on health hazards

Other hazards

Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Aluminium oxide LC 50, Salmo trutta, 96 h, > 100 mg/l, Literature

Aquatic Invertebrates

Product: No data available.

Components:

Aluminium oxide EC 50, Daphnia magna, 48 h, > 100 mg/l, Literature

Toxicity to Aquatic Plants

Product: No data available.

Components:

Aluminium oxide EC 50, Algae (Pseudokirchneriella subcapitata), 72 h, > 100 mg/l, Literature

Toxicity to microorganisms

Product: No data available.

Components:

Aluminium oxide EC 10, activated sludge, 3 h, 1,000 mg/l, OECD 209, (analogy)
EC 10, activated sludge, 3 h, > 200 mg/l, OECD 209

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to microorganisms

Product: No data available.

Components:

Aluminium oxide EC 10, activated sludge, 3 h, 1,000 mg/l, OECD 209, (analogy)
EC 10, activated sludge, 3 h, > 200 mg/l, OECD 209

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

Aluminium oxide The methods for determining biodegradability are not applicable to inorganic substances.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:
Aluminium oxide Not to be expected.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Components:
Aluminium oxide , Not applicable

Mobility in soil:

Product: No data available.

Components:
Aluminium oxide No remarkable mobility in soil is to be expected.

Results of PBT and vPvB assessment:

Product: No data available.

Other adverse effects:

Other hazards

Product: No data available.

13. Disposal considerations

General information: Pack and label wastes like the pure substance. Do not detach label from the delivery containers prior to disposal.

Disposal methods: Dispose of in accordance with local regulations.

Contaminated Packaging: Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities.

14. Transport information

Domestic regulation

49 CFR

Not regulated as a dangerous good

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Proposed Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not classified

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

<u>Chemical Identity</u>	<u>% by weight</u>
Aluminum oxide (fibrous forms) (Alumina)	1.0%

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	1
Flammability	0
Physical Hazards	0
PERSONAL PROTECTION	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Version #: 1.0
Generation date: 01/10/2024
Date of first report version: 01/10/2024

Abbreviations and acronyms:

ACGIH: US. ACGIH Threshold Limit Values, as amended
OSHA_TRANS: US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Z3: US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
ACGIH / TWA: Time Weighted Average (TWA):
OSHA_TRANS / PEL: Permissible exposure limit:
Z3 / TWA: Time Weighted Average (TWA):

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic

Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further Information: No data available.

Revision Information Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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