

DS-Ice Spray Cooling spray

Material safety data sheet (MSDS) Version 1.0 / EN

01.12.2019







SECTION 1: THE NAME AND STRUCTURE OF SUBSTANCE OR A MATERIAL

1.1. Product identifier

Product Name DS-ICE Spray Code DSICE

1.2. Structure

Substance Aerosol H222-H2291

SECTION 2: DATA ON THE ORGANIZATION-MANUFACTURER OR THE SUPPLIER

2.1. Details of the manufacturer:

Company Name PFO Vetos-Farma Sp.zo.o

Company Address 21 Dzierzoniowska str., 58-260 Bielawa, Poland

 NIP
 882-18-81-566

 Phone / Fax
 +48.74.833.45.65

 E-mail
 biuro@theta-doradztwo.pl

2.2. Details of the supplier of the safety data sheet:

Company Name DSI Ltd.

Company Address 59 haAvoda str., Ashdod 7706300, Israel

Contact Name Shlomi Krasner
Phone / Fax +972.893.172.35
E-mail info@dsisrael.com

SECTION 3: IDENTIFICATION OF HAZARDS

3.1. Classification of the substance or mixture Regulation (EC) No. 1272/2008

Hazard categories:

Aerosol: Aerosol 1
Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements: Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes serious eye irritation.

3.2. Label elements

Regulation (EC) No. 1272/2008

Extremely flammable aerosol. Pressurised container: may explode if heated. Irritating to eyes. May cause drowsiness or dizziness.



Hazard pictogram and signal word:





Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P271 Apply only outdoors or in a well-ventilated area.

P501 Dispose of contents/container in accordance with national regulations in a properly labelled waste container.

Labelling of packages where the contents do not exceed 200 ml

3.3. Other hazards

The components of the mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

SECTION 4: COMPOSITION/INFORMATION ON INGREDIENTS

4.1. Hazardous components: Not applicable.

Fuel gas:

CAS: 115-10-6	dimethyl¹ ether)			
	EINECS: 204-065-8	Index No	REACH No	100%
	Index number: 603-019-00-8			
	Competent registration number:			

Input:

CAS: 64-17-5	Ethanol				
	EINECS: 200-578-6	Index No		REACH No	98<%
	Index number: 603-002-00-5		Flam. Liq. F	12252, Eye Irrit. H3192	
Applicable registration number:	101-211945/h10-43-XXXX		Specific concentration limits: Eye Irrit. H3192 ≥ 50%		
CAS: 67-56-1	Methanol 1)				



	EINECS: 200-659-6	Index No		REACH No	≤2%
	Index number: 603-001-00-X	Flam. Liq. H2252, Eye Irrit. H3192			
Competent registration number:	01-2119433307-44-XXXX				3, Acute Tox. 3

¹⁾ A substance with an EU-established occupational exposure limit value. The full text of the H-phrases is quoted in the section of the card16.

SECTION 5: FIRST AID MEASURES

5.1. Description of first aid measures

In contact with skin:

Remove contaminated clothing. Wash exposed skin areas thoroughly with water. Consult a doctor in case of alarming symptoms.

Eye contact:

Rinse contaminated eyes thoroughly with water for 15 minutes. Avoid strong jets of water - risk of corneal damage. Protect non-irritated eye, remove contact lenses. Consult an ophthalmologist in case of alarming symptoms.

In case of ingestion:

Exposure through this route normally does not occur, but in case of accident rinse mouth with water. Do not induce vomiting. Never put anything in the mouth of an unconscious person. If necessary, consult a doctor, show the label.

After inhalation:

Consult a doctor in case of distressing symptoms.

5.2. Most important symptoms and effects, both acute and delayed

On contact with eyes: tearing, redness, burning sensation, irritation.

On contact with skin: adverse effects of exposure are not expected.

After inhalation: product may cause headache, dizziness and drowsiness.

5.3. Indication of any immediate medical attention and special treatment needed

The rescue procedure is decided by the doctor after a thorough assessment of the victim's condition. Symptomatic treatment.

SECTION 6: FIREFIGHTING MEASURES

6.1. Extinguishing devices

Suitable extinguishing media: Extinguishing foam, carbon dioxide, extinguishing powder, water spray. Adjust extinguishing media to suit surrounding materials.

Unsuitable extinguishing media: Water jet - risk of fire spreading.

6.2. Special hazards arising from the substance or mixture

During combustion harmful gases containing, among others, carbon oxides and other unidentified thermal decomposition products may be released. Avoid inhaling combustion products, they may pose a health risk.



6.3. Information for fire brigades

Product under pressure. Containers may explode if heated. Wear general protective equipment normally used in case of fire. Do not stay in fire endangered area without suitable chemical resistant clothing and self-contained breathing apparatus. Cool fire endangered containers with water spray from a safe distance. Collect residual extinguishing agent.

6.1 Personal precautions, protective equipment and emergency procedures

Restrict access of bystanders to the accident area until adequate clean-up operations have been completed. In case of large releases isolate the affected area. Remove sources of ignition. Ensure adequate ventilation. Avoid contact with eyes.

6.2 Environmental precautions

If larger quantities are released, steps must be taken to prevent dispersal into the environment.

6.3 Methods and material for containment and cleaning up

Collect damaged packaging mechanically. Collect small spills with absorbent material. Collect larger spills with non-flammable absorbent materials (e.g. sand, earth, universal binders, silica) and place in labelled containers. Dispose of the collected material as waste. Handle in accordance with applicable regulations. Use non-sparking tools. Clean and well-ventilate contaminated area. Do not pierce packaging, even after use.

6.4 References to other sections

Disposal of product waste.

Personal protective equipment.

SECTION 7: ACCIDENTAL RELEASE MEASURES

7.1 Precautions for safe handling

Work in accordance with safety and hygiene rules. Wash hands before breaks and after finishing work. Ensure adequate ventilation. Keep away sources of heat and fire, do not smoke. Prevent electrostatic discharges. Avoid contact with eyes. Protect containers from sunlight and heat above 50°C.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place. Keep away from sources of heat and fire, protect from sunlight and heat above 50°C. Keep away from food and drink. Do not pierce or burn pressurised containers, even after use.

7.3 Specific end use(s)

No information on uses other than those specified in the subsection 1.2.

SECTION 8: HANDLING AND STORAGE

8.1. Precautions for safe handling

Advice on safe handling

Do not pierce or burn, even after use. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.



Keep away from sources of ignition — No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

8.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

8.3. Specific end use(s)

Spray application: oral.

SECTION 9: EXPOSURE CONTROLS/PERSONAL PROTECTION

9.1. Control parameters

CAS No	Substance	NDS	NDSCh	NDSP	DSB
64-17-5	Ethanol	1900 mg/m ³	-	-	-
115-10-6	Dimethyl ether	1000 mg/m ³	-	-	-
67-56-1	Methanol*	100 mg/m ³	300 mg/m ³	-	-

^{*} Dermal absorption of a substance may be as important as inhalation exposure Legal basis: O.J. pos.

9.2. Exposure controls

Observe the general principles of safety and hygiene. Do not eat, drink or smoke while working. Wash hands thoroughly before breaks and after finishing work. Ensure general and/or local ventilation at the workplace.

Personal protective equipment

The need for and selection of appropriate PPE should take into account the type of hazard posed by the product, the conditions in the workplace and the handling of the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer must ensure that the protective equipment is suitable for the activities performed and meets all quality requirements, including its maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

Hand protection

Not required under normal working conditions.

Eye/face protection

Wear tightly fitting safety goggles.

Respiratory protection

Use respiratory protection in case of emergency.

Environmental exposure controls

Avoid discharge to the environment, do not empty into drains. Possible emissions from ventilation systems and process equipment should be checked to determine their compliance with the requirements of environmental law.



SECTION 10: PHYSICAL AND CHEMICAL PROPERTIES

10.1. Information on basic physical and chemical properties

Physical state: Liquid (Aerosol)

Color: according to assortment

Odor: characteristic odourthreshold: not determined pH-Value: not applicable

melting/freezing point: no determination determined initial boiling point and range

Changes in the physical state

Melting point:
Initial boiling point and boiling range:
Flash point:
boiling point:
flashpoint:
contact determined
not determined
not determined
not determined
not determined
not determined
not determined

flammability (solid, gas): extremely flammable product

Upper/lower explosive limit: not applicable not determined vapourpressure: Vapourdensity: not determined density (20 °C): not determined solubility: not determined partition coefficient: not self-ignitable octanol/water: not determined not self-ignitable point: decomposition temperature: not determined

explosive properties: none oxidising properties: none

viscosity: not determined

10.2. Other information

No additional studies.

SECTION 11: STABILITY AND REACTIVITY

11.1. Reactivity

It does not undergo dangerous polymerization. See also subsections 11.3 to 11.5.

11.2. Chemical stability

When used and stored correctly, the product is stable.

11.3. Possibility of hazardous reactions

No dangerous reactions known.

11.4. Conditions to avoid

Avoid sources of heat and fire. Protect from temperatures >50 °C.



11.5. Incompatible materials

Strong oxidants.

11.6. Hazardous decomposition products

They are not known.

SECTION 12: TOXICOLOGICAL INFORMATION

Acute toxicity

ATEmix (oral)2000 mg/kg ATEmix (dermal)2000 mg/kg

ATEmix (inhalation)>20mg/l

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Irritating to eyes.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Toxic effects on specific target organs - single exposure

May cause headaches and dizziness.

Specific target organ toxicity - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 13: ECOLOGICAL INFORMATION

13.1. Toxicity

The product is not classified as hazardous to the aquatic environment.

13.2. Persistence and degradability

Ethanol: biodegradation: 88%/d 8 [method: OECD b] 301

13.3. Bioaccumulative potential

Bioaccumulation is not expected.

13.4. Mobility in soil

The mobility of components of a mixture depends on their hydrophilic and hydrophobic properties and the



abiotic and biotic conditions of the soil, including its structure, climatic conditions, season and soil organisms.

13.5. Results of PBT and vPvB assessment

The product components do not meet the criteria for PBT or vPvB substances according to Annex XIII of REACH.

13.6. Other adverse effects

The mixture is not classified as hazardous to the ozone layer. The possibility of other harmful effects of the individual components of the mixture on the environment (e.g. ability to disrupt the hormonal economy, influence on the increase of global warming) should be considered.

SECTION 14: DISPOSAL CONSIDERATIONS

14.1. Waste treatment methods

Recommendations for the mixture

Dispose of in accordance with valid regulations. Do not remove product residues from original packaging. Transfer waste product to an authorised disposal plant.

Recommendations for used packaging

The recovery / recycling / disposal of packaging waste should be carried out in accordance with current legislation. Do not pierce or burn, even after use. Dispose of product packaging.

Union legal acts: European Parliament and Council Directives: 2008/98/EC as amended and 94/62/EC as amended. National legal acts: OJ. 2013, pos. with21 amendments; Journal of Laws pos.2013, with888 amendments.

SECTION 15: TRANSPORT INFORMATION

15.1. Land transport (ADR/RID)

UN number: UN 1950

UN proper shipping name: AEROSOLS, flammable

IMDG AEROSOLS

ICAO/IATA AEROSOLS, FLAMMABLE

Transport hazard class(es): 2
Packing group: Subclass: 2.1

15.2 Packing group

Not applicable.

15.3 Environmental hazards

The product does not present a hazard to the environment according to transport regulations.

14.6 Special precautions for users

Items of consignment should not be thrown or subjected to impact. Dishes should be stacked on the vehicle or container so that they cannot tip or fall. Remove sources of ignition. Use personal protective equipment in



accordance with section 8.

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

thrown or subjected to impact. Dishes should be stacked on the vehicle or container so that they cannot tip or fall. Remove sources of ignition. Use personal protective equipment in accordance with section 8.

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

Not applicable.

Other information

ADR

limited quantities LQ 1
classification code litre

5F

special provisions 190,327,344, 625

transport category 2

code for restrictions on carriage through tunnels (D)

IMDG

limited quantities of LQ 1000 mL EmS code F-D, S-U environmental hazard/marine pollutant no / no

environmentar nazaru/manne ponutant no / no

special provisions 63,190,277,327,344,381, 959

ICAO/IATA

special provisions: A145, A167, A802

packaging instructions (LQ): Y203
limited quantity (LQ), passenger: 30 kg G
packing instruction, passenger: 203
maximum number, passenger: 75 kg
Packing instruction, Cargo: 203
maximum quantity, Cargo: 150 kg

SECTION 16: REGULATORY INFORMATION

16.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Act of 25 February 2011 on chemical substances and their mixtures (Journal of Laws No. 63, item 322, as amended). Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the working environment (Journal of Laws 2018, item 1286).

Law on waste of 14 December 2012. (Journal of Laws 2013, item 21, as amended).

The Act of June13 June,2013 2007 on the management of packaging and packaging waste (Journal of2013, Laws, 888as amended).

Regulation of the Minister of Environment of 9 December 2014 on the waste catalogue (Journal of Laws 2014, item 1923). Ordinance of the Minister of Economy of December 21 9,2005 2014 on the essential requirements for personal protective equipment (Dz. U. No. item 259, 2173).

Ordinance of the Minister of Health of February 2 February on tests and measurements of harmful factors in the work environment (Dz. U. No. 166)201133,.



Ordinance of the Minister of Economy of March5 2009 on detailed requirements for aerosol products (Journal of Laws No. item188,., 1460as amended).

European Agreement ADR concerning the international carriage of dangerous goods by road.

1907/2006/EC Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and No 1488/94 as well as Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended.

1272/2008/EC Regulation of the European Parliament and of the Council of December16 2007 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/ EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, as amended 2008.

2015/830/EU Commission Regulation of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

2008/98/EC Directive of the European Parliament and of the Council of November 19 2008 on waste and repealing certain Directives 2008, as amended.

94/62/EC Directive of the European Parliament and of the Council of December 20 December on packaging and packaging waste, as amended 1994.

2016/425/EU Regulation of the European Parliament and of the Council of March9 on personal protective equipment and repealing Council Directive 89/686/EEC2016.

16.2. Chemical safety assessment

H220

PEL

A chemical safety assessment is not required for the mixture.

SECTION 17: OTHER INFORMATION

Full text of H-phrases from section 3 of the card Extremely flammable gas.

	Extremition gast
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H301	Toxic if swallowed.
H311	Toxic effects through contact with skin.
H315	Sensitizes the skin.
H319	Eye irritant.
H331	Toxic effects through inhalation.
H336	May cause drowsiness or dizziness.
H370	Causes damage to organs.

Explanation of abbreviations and acronyms

MPECAH	Highest Momentary Con MPECA Highest Admissible Ceiling Concentration
DSBDE	Limited Concentration in Biological Material
IATA	International Civil Aviation Organisation/International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
	ADR-European agreement concerning the international carriage of dangerous goods by road
RID	Regulations concerning the international carriage of dangerous goods by rail

PBTS Persistent, bioaccumulative and toxic substances

Maximum Permissible Concentration



vPvB Substances very persistent and very bioaccumulative Flam. gas Flammable 1gascategory 1

Press. Gas Gasunder pressure

Flam. Liq. 2 flammable liquid Category 2Eye Irritation Category 2Acute Tox. 2 Acute Tox 33

STOT SE 1,3 target organ toxicity - single exposure category 1, 3

Training

Before handling the product, the user should be acquainted with health and safety rules regarding the handling of chemicals and, in particular, receive appropriate job-specific training. Persons involved in the transport of hazardous materials in accordance with the ADR Agreement should be adequately trained for their duties (general, job and safety training).

Classification and procedures used to classify the mixture according to Regulation (EC) 1272/2008 [CLP] as amended

Aerosol H222-H2291 classification based on manufacturer's data

Eye Irrit. H319 calculation method2 STOT SE H3363 calculation method

Sources of information

The Safety Data Sheet has been prepared on the basis of safety data sheets for individual components provided by the manufacturer, literature data, internet databases (e.g. ECHA, TOXNET, COSING) and our knowledge and experience, taking into account the currently valid legal regulations.

Additional information

Date of issue: 10.07.2019r.

Version:1.0/EN

Person drawing up the card:mgr Aleksandra Gendek

Card issued by: "THETA" Technical Consultancy

The above information is based on the currently available product characteristics and the experience and knowledge of the manufacturer. They do not constitute a qualitative description of the product or a promise of certain properties. It should be regarded as an aid to safe handling during transport, storage and use of the product. This does not release the user from the responsibility for improper use of the above information and from the observance of all the legal standards in force in this field.

Since the working conditions of the final user are unknown, the information presented in this safety data sheet is based on the current level of our knowledge, based on national and general standards.

The product should not be used for any other purpose than those indicated under heading without first receiving written instructions for use. The user must take all necessary measures to comply with the requirements and rules of the law. The information in this safety data sheet should be considered as a description of the safety requirements that apply to our product and does not guarantee its properties.