ScanSpray

Spray for intraoral scans and testing of friction and fit of dental restorations

Material safety data sheet (MSDS)
Version 1.0 / EN

11.04.2019

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

1.1. Product identifier

Product Name	DSI ScanSpray
Code	DF-11147med

1.2. Structure

Substance	Spray application: oral

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

2.1. 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

2.2. Emergency telephone number:

Phone / Fax	+972.893.172.35

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

Signal word: Danger

Pictograms:

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.

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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of waste according to applicable legislation.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H222-H229

Precautionary statements

P210-P211-P251-P410+P412

3.3. Other hazards

Can cause frostbite.
Danger of suffocation in case of accumulation in lowlying or closed rooms.

SECTION 4: COMPOSITION/INFORMATION ON INGREDIENTS

4.1. Hazardous components:

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64-17-5	ethanol, ethyl alcohol			5 – < 10 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

Full text of H and EUH statements: see section 17.

SECTION 5: FIRST AID MEASURES

5.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Danger of suffocation in case of accumulation in lowlying or closed rooms. Move victim out of danger zone. When in doubt or if symptoms are observed, get medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

Wash with plenty of water. In case of frostbite, wash with plenty of water; do not remove clothing. Take off contaminated clothing and wash it before reuse. Call a doctor.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist. Can cause frostbite.

After ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person or a person with cramps.

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

No information available.

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

Treat symptomatically.

SECTION 6: FIREFIGHTING MEASURES

6.1. Extinguishing devices

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

6.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.
In case of fire may be liberated: Gases/vapours, toxic, Gases/vapours, corrosive.

6.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protective suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 7: ACCIDENTAL RELEASE MEASURES

7.1. Personal precautions, protective equipment and emergency procedures

Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

7.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

7.3. Methods and material for containment and cleaning up

Provide adequate ventilation. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

7.4. Reference to other sections

Safe handling: see section 8
Personal protection equipment: see section 9
Disposal: see section 14

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	ppm	mg/m³	fibres/ml	Category	Origin
811-97-2	1,1,1,2-Tetrafluoroethane (HFC 134a)	1000	4240		TWA (8 h)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, respirable	–	4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
811-97-2	Norflurane			
Worker DNEL, long-term		Inhalation	Systemic	14000 mg/m³
64-17-5	ethanol, ethyl alcohol			
Worker DNEL, long-term		Inhalation	Systemic	950 mg/m³
Worker DNEL, acute		Inhalation	Local	1900 mg/m³
Worker DNEL, long-term		Dermal	Systemic	343 mg/kg bw/day
Consumer DNEL, long-term		Inhalation	Systemic	114 mg/m³
Consumer DNEL, acute		Inhalation	Local	950 mg/m³
Consumer DNEL, long-term		Dermal	Systemic	206 mg/kg bw/day
Consumer DNEL, long-term		Oral	Systemic	87 mg/kg bw/day
13463-67-7	Titanium dioxide			
Worker DNEL, long-term		Inhalation	Local	10 mg/m³
Consumer DNEL, long-term		Oral	Systemic	700 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
811-97-2	Norflurane
Freshwater	0,1 mg/l
Freshwater (intermittent releases)	1 mg/l
Marine water	0,01 mg/l
Freshwater sediment	0,75 mg/kg
Micro-organisms in sewage treatment plants (STP)	73 mg/l
64-17-5	ethanol, ethyl alcohol
Freshwater	0,96 mg/l
Freshwater (intermittent releases)	2,75 mg/l
Marine water	0,79 mg/l
Marine water (intermittent releases)	2,75 mg/l
Freshwater sediment	3,6 mg/kg
Marine sediment	2,9 mg/kg
Secondary poisoning	0,72 mg/kg
Micro-organisms in sewage treatment plants (STP)	580 mg/l
Soil	0,63 mg/kg
13463-67-7	Titanium dioxide
Freshwater	1 mg/l
Marine water	0,127 mg/l
Freshwater sediment	1000 mg/kg
Marine sediment	100 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/kg
Soil	100 mg/kg

9.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Take off contaminated clothing. Draw up and observe skin protection programme. Wash hands before breaks and after work. When using do not eat, drink or smoke.

Eye/face protection

Wear eye protection/face protection.

Hand protection

Wear suitable gloves.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Avoid release to the environment.

SECTION 10: PHYSICAL AND CHEMICAL PROPERTIES

10.1. Information on basic physical and chemical properties

Physical state:	Liquid (Aerosol)
Color:	white
Odor:	characteristic
pH-Value:	not determined

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	(Ethanol) 12 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

Vapours can form explosive mixtures with air.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidizing.

Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

10.2. Other information

Odour threshold:	not determined

SECTION 11: STABILITY AND REACTIVITY

11.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

11.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

11.3. Possibility of hazardous reactions

Vapours can form explosive mixtures with air.

11.4. Conditions to avoid

Risk of explosion by shock, friction, fire or other sources of ignition. Remove all sources of ignition. Keep away from heat.

11.5. Incompatible materials

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

11.6. Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic, Gases/vapours, corrosive.

SECTION 12: TOXICOLOGICAL INFORMATION

12.1. Information on toxicological effects

Acute toxicity

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

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
64-17-5	ethanol, ethyl alcohol				
	oral		LD50 > 5000 mg/kg	Rat	Manufacturer
	inhalative (4 h) vapour		LC50 124,7 mg/l	Rat	Manufacturer

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-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: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity		LC50 14200 mg/l	96 h	Pimephales promelas (fathead minnow)	Manufacturer
	Acute algae toxicity		ErC50 275 mg/l	72 h	Chlorella vulgaris	Manufacturer
	Acute crustacea toxicity		EC50 5012 mg/l	48 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer
	Crustacea toxicity		NOEC 9,6 mg/l	9 d	Daphnia magna (Big water flea)	Manufacturer

13.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	[d]	Source
	Evaluation			
64-17-5	ethanol, ethyl alcohol			
	No information available.	84 %	20	Manufacturer
	Readily biodegradable (according to OECD criteria).			

13.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	–0,31

13.4. Mobility in soil

The product has not been tested.

13.5. Results of PBT and vPvB assessment

The product has not been tested.

13.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 14: DISPOSAL CONSIDERATIONS

14.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 15: TRANSPORT INFORMATION

15.1. Land transport (ADR/RID)

UN number:	UN 1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2
Packing group:	–
Hazard label:	2.1

Classification code: 5F

Special provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

15.2. Inland waterways transport (ADN)

UN number:	UN 1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2
Packing group:	–
Hazard label:	2.1
Classification code:	5F
Special provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

15.3. Marine transport (IMDG)

UN number:	UN 1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Packing group:	–
Hazard label:	2.1
Classification code:	5F
Special provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 ml
Excepted quantity:	E0
EmS:	F-D, S-U

Other applicable information (marine transport)

15.4. Air transport (ICAO-TI/IATA-DGR)

UN number:	UN 1950
UN proper shipping name:	AEROSOLS, flammable
Transport hazard class(es):	2.1
Packing group:	–
Hazard label:	2.1
Special provisions:	A145 A167 A802
Limited quantity passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions – Passenger:	203
IATA-max. quantity – Passenger:	75 kg
IATA-packing instructions – Cargo:	203
IATA-max. quantity – Cargo:	150 kg

15.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

15.6. Special precautions for user

No information available.

15.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 16: REGULATORY INFORMATION

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3:	ethanol, ethyl alcohol
Entry 40:	ethanol, ethyl alcohol
2010/75/EU (VOC):	< 94%
Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS

Additional information

Aerosol directive (75/324/EEC).

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	1 – slightly water contaminating

16.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 17: OTHER INFORMATION

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Eye Irrit. 2; H319	Bridging principle “Aerosols”

Relevant H- and EUH-phrases (Number and full text)

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H319 Causes serious eye irritation.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.

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.