

GDT CAD-CAM POWDER SCANNING SPRAY

SPRAY FOR INTRAORAL SCANS AND TESTING OF FRICTION AND FIT OF DENTAL RESTORATIONS



Material safety data sheet (MSDS) Version 1.0 / EN



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

1.1. Product identifier

Product GDT

Name CAD/CAM_Scanning_Spray

Code GD-CS75

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 GDT Implants.

Company_Address Yitzhak Ben Zvi 9/64 Beer Sheva, Israel

Contact_Name Yakir Solcman
Phone/Fax +972.54.77.90.282
E-mail info@gdt-Implants.com

2.2. Emergency telephone number:

Phone / Fax +972.54.77.90.282

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. Pressurised H229 container: May burst if heated. Causes H319 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, acidor 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	urane					
Worker DNEL, I	ong-term	Inhalation	Systemic	14000 mg/m ³			
64-17-5	ethanol, ethyl alcohol						
Worker DNEL, Id	ong-term	Inhalation	Systemic	950 mg/m ³			
Worker DNEL, acute Worker		Inhalation	Local	1900 mg/m ³			
DNEL, long-term Consumer		Dermal	Systemic	343 mg/kg bw/day			
DNEL, long-term Consumer		Inhalation	Systemic	114 mg/m ³			
DNEL, acute Consumer		Inhalation	Local	950 mg/m ³			
DNEL, long-term Consumer		Dermal	Systemic	206 mg/kg bw/day			
DNEL, long-tern	m	Oral	Systemic	87 mg/kg bw/day			
13463-67-7	Titanium dioxide						
Worker DNEL, long-term		Inhalation	Local	10 mg/m ³			
Consumer DNEL, long-term		Oral	Systemic	700 mg/kg bw/day			



PNEC values

CAS No	Substance					
Environmental	l compartment	Value				
811-97-2	1-97-2 Norflurane					
Freshwater 0,1 mg/l						
Freshwater (intermittent releases) 1 mg/l						
Marine water		0,01 mg/l				
Freshwater se	diment	0,75 mg/kg				
Micro-organis	ms in sewage treatment plants (STP)	73 mg/l				
64-17-5	ethanol, ethyl alcohol					
Freshwater		0,96 mg/l				
Freshwater (in	termittent 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 sedime	ent	2,9 mg/kg				
Secondary po	isoning	0,72 mg/kg				
		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-organis	ms 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 Liquid (Aerosol)

state: Color: white

Odor: characteristic pH-Value: not determined

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

determined

Flash

not determined

not determined

point:

(Ethanol) 12 °C

Flammability

Solid not applicable not applicable

Gas:

Explosive properties

Vapours can form explosive mixtures with

air. Lower explosion not determined limits: Upper not determined explosion limits: not determined

Ignition temperature:

Auto-ignition temperature

Solid: not applicable Gas: not applicable

Decomposition not

temperature: determined

Oxidizing properties

Not oxidizing.

Partition coefficient:

Viscosity / dynamic:

Viscosity /

viscosity /

kinematic: Vapour

density: Evaporation

not determined

not determined

not determined

not determined

rate:

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	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	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source	
64-17-5	ethanol, ethyl alcohol	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	V	/alue	[d]	Source
	Evaluation				
64-17-5	ethanol, ethyl alcohol				
	No information available.	8	34 %	20	Manufacturer
	Readily biodegradable (according to OECD of	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 -0,31

alcohol

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 D

code:

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 5F code: Special 190 327 344 625

provisions: Limited 1 L quantity: Excepted E0

quantity:

15.3. Marine transport (IMDG)

UN 1950

UN proper shipping name: AEROSOLS

Transport hazard class(es):

Packing group:

Hazard label:

2.1

Classification 5F

code: Special 63, 190, 277, 327, 344, 959

provisions: Limited 1000 ml quantity: Excepted E0 quantity: 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: Limited A145 A167 A802

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 – 203
Cargo: IATA-max. quantity – 150 kg

Cargo:



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 ethanol, ethyl alcohol

2010/75/EU (VOC): < 94%

Information according to 2012/18/EU P5c FLAMMABLE LIQUIDS

(SEVESO III):

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 Aerosol
1; H222-H229 Eye basis of test data 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.