Safety Data Sheet

According to 1907/2006/EG, Article 31

1. Identification of the substance/ mixture and of the company/undertaking

Item description: D-SCAN Scanspray 390-0200

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

No further relevant information available.

Application of the substance: Auxiliary for dental technology

Manufacturer:

Dentify GmbH
Scheffelstr. 22
78234 Engen / Germany

Information: Tel: + 49-7733-977 62 40, Fax: +49-7733-977 62 44
(Mo – Do 8:00 – 16:30, Fr 8:00 – 15:00)

Emergency: Tel: + 49-7733-977 62 40
(Mo – Do 8:00 – 16:30, Fr 8:00 – 15:00)

2. Hazards identification

Classification of the substance according to regulation (EC) No. 1272/2008

GHS02 Flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F+; Extremely flammable
R12: Extremely flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not
pierce or burn, even after use.

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02

Signal word: Danger

Hazard statements

H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

Precautionary statements

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

P251 Do not pierce or burn, even after use.
P211 Do not spray on an open flame or other ignition source.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Additional information:
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No smoking.
Keep out of the reach of children
Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3. Composition/ information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.
Dangerous components:

CAS: 75-28-5 EINECS: 200-857-2	Isobutan	 F+ R12  Flam. Gas1, H220; Press.Gas,H280	50-100%
CAS: 64-17-5 EINECS: 200-578-6	Ethanol	 F+ R11  Flam. Liq. 2, H225	50-100%

Additional information: For the wording of the listed risk phrases refer to section 16.

4. First aid measures

Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.
Information for doctor: Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed:
No further relevant information available.

5. Firefighting measures

Extinguishing media
Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents:
Water with full jet
Special hazards arising from the substance or mixture No further relevant information available.
Advice for firefighters
Protective equipment: Do not inhale explosion gases or combustion gases.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Ensure adequate ventilation.
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and Storage

Handling:
Precautions for safe handling
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Information about fire - and explosion protection:
Keep ignition sources away – Do not smoke.
Protect against electrostatic charges.
Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep container tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Specific end use(s) No further relevant information available.

8. Exposure controls/ personal protection

Additional information about design of technical facilities: No further data; see item 7.
Control parameters
Ingredients with limit values that require monitoring at the workplace:
75-28-5 Isobutan
AGW Long-term value: 2400 mg/m³, 1000 ml/m³
4(II);DFG

64-17-5 ethanol
WEL Long-term value: 1920mg/m³, 1000 ppm
Additional information: The lists valid during the making were used as basis.
Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Respiratory protection: Not necessary if room is well-ventilated.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
As protection from splashes gloves made of the following materials are suitable:
Natural rubber, NR
Butyl rubber, BR
Nitrile rubber, NBR
Eye protection:

Tightly sealed goggles

9. Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:

Form:	Aerosol
Colour:	Whitish
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.

Change in condition

Melting point:	Undetermined
Boiling point:	-11 °C
Flash point:	Not applicable, as aerosol.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	460 °C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Not determined.
Explosion limits:	Lower: 1.8 Vol % (Propan/Butan)/ Upper: 8.5 Vol % (Propan/Butan)
Vapour pressure at 20 °C:	3000 hPa
Density at 20 °C:	0.64 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with water	Not miscible or difficult to mix

Partition coefficient (n-octanol/water): Not determined.
Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

Solvent content:

Organic solvents:	9.0 %
VOC (EC)	94 %
Solids content:	6 %
Other information	No further relevant information available.

10. Stability and reactivity

Reactivity
Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products:
No dangerous decomposition products known.

11. Toxicological information

Information on toxicological effects
Acute toxicity:
LD / LC50 values relevant for classification
64-17-5 ethanol

Oral	LD50	7060mg/kg (rat)
Inhalative	LC50/4 h	20000 mg/l (rat)

Primary irritant effect:

on the skin:	No irritant effect.
on the eye:	No irritating effect.
Sensitization:	No sensitizing effects known.

12. Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability The single components are biodegradable.
Behaviour in environmental systems:
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Ecotoxical effects:
Remark: The product is high-volatile.
Additional ecological information:
General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

13. Disposal considerations

Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
European waste catalogue
16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00 gases in pressure containers and discarded chemicals
16 05 04 gases in pressure containers (including halons) containing dangerous substances
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

14. Transport information

UN-Number
ADR, IMDG, IATA UN1950
UN proper shipping name
ADR 1950 AEROSOLS
IMDG AEROSOLS
IATA AEROSOLS, flammable

Transport hazard class(es)
ADR

Class 2 5F Gases.
Label 2.1

IMDG, IATA

Class 2.1
Label 2.1

Packing group
ADR, IMDG, IATA Void
Environmental hazards:
Marine pollutant: No
Special precautions for user Warning: Gases.
Danger code (Kemler): -
EMS Number: F-D,S-U
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

	Not applicable.
Transport/Additional information:	
ADR	
Excepted quantities (EQ):	E0
Limited quantities (LQ)	1L
Transport category	2
Tunnel restriction code	D
UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02

Signal word	Danger
Hazard statements	
	H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.
Precautionary statements	
	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251 Do not pierce or burn, even after use. P211 Do not spray on an open flame or other ignition source. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases	H220 Extremely flammable gas. H225 Highly flammable liquid and vapour H280 Contains gas under pressure; may explode if heated. R11 Highly flammable. R12 Extremely flammable.

The above given data are based upon our stand of knowledge and experience from the issuing date, they do not have any relevance of characteristics warranty. No responsibility will be taken for the faultessness and integrity.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the
International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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 (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent