

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

· **Trade name:** *PTFE-Spray* Art.-no. *IDS210*

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture** *Lubricant*

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

IDS Industrie Dichtungs Service

Burgstraße 12

D - 47877 Willich

Tel. (+49) 02154/88 990-90

Fax (+49) 02154/88 990-92

info@industrie-dichtungsservice.de

www.industrie-dichtungsservice.de

· **Further information obtainable from:**

Tel. (+49) 02154/88 990-90 E-Mail: info@industrie-dichtungsservice.de

1.4 Emergency telephone number:

Tel. (+49) 02154/88 990-90

Monday - Thursday 8:00 - 17:00 CET, Friday 8:00 - 13:00 CET

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008**

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

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 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. Pressurised container: May burst if heated.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P102 Keep out of reach of children.

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.

P260 Do not breathe vapours/spray.

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

P501 Dispose of contents / container as special waste.

· **2.3 Other hazards** *Smoking of contaminated tobacco may cause polymer-smoke-fever*

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

Trade name: PTFE-Spray

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description:

Mixture of substances listed below with nonhazardous compounds or compounds with no duty to declare.

· Dangerous components:

CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane Flam. Gas 1, H220; Press. Gas C, H280	50-100%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1, H220; Press. Gas L, H280	10-25%
CAS: 64742-49-0 EC number: 920-750-0 Reg.nr.: 01-2119473851-33	Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cycloalkanes Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	2.5-10%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27	isobutane (<0,1% butadiene) Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

· **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.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· Information for doctor:

Smoking of contaminated tobacco may cause polymer-smoke-fever

Smoking of tobacco, which is contaminated with the product, causes "polymer smoke fever".

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

Fluorinated pyrolysis products

During heating or in case of fire poisonous gases are produced.

Risk of bursting in case of fire heat

· 5.3 Advice for firefighters

· Protective equipment:

Mouth respiratory protective device.

Wear fully protective suit.

· **Additional information** Cool endangered receptacles with water spray.

GB

(Contd. on page 3)

Trade name: PTFE-Spray

(Contd. of page 2)

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Let volatiles evaporate - stem up residues mechanically
Ensure adequate ventilation.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Recommended storage temperature:** 15 - 35°C, max. 50°C
- **7.3 Specific end use(s)** Industrial Use

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane

WEL (Great Britain)	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
---------------------	---

67-63-0 Propan-2-ol

WEL (Great Britain)	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
---------------------	--

· **DNELs**

64742-49-0 Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cycloalkanes

Oral	DNEL Endverbraucher/ Consumers /Consommateur	699 mg/kg BW/ day (.)
Dermal	DNEL - Endverbraucher/ Consumers /Consommateur	699 mg/kg BW /day (.)

(Contd. on page 4)

Trade name: PTFE-Spray

(Contd. of page 3)

Inhalative	DNEL Arbeiter / Workers/ Travailleur	773 mg/kg BW /day (.)
	DNEL Endverbraucher/ Consumers /Consommateur	608 mg /m3 (.)
	DNEL Arbeiter / Workers/ Travailleur	2,035 mg /m3 (.)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Filter: ABEK-P2



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

If contamination is possible, use gloves made of nitrile according EN 374

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**

> 480 min / 0,4 mm thickness

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses in case of spittings

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: Whitish

· **Odour:** Recognisable

· **Odour threshold:** Not determined.

· **pH-value:** nicht anwendbar

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: -44 °C
 value concerns to propellant

· **Flash point:** -97 °C
 concerns to propellant

· **Flammability (solid, gas):** Contains extremely flammable liquefied gas

(Contd. on page 5)

Trade name: PTFE-Spray

(Contd. of page 4)

· Ignition temperature:	365 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Risk of bursting at temperatures > 50°C. Damage of the container may lead to the formation of explosive mixtures of gas/vapors with air.
· Explosion limits:	
Lower:	1.5 Vol %
Upper:	10.9 Vol %
Pressure (20°C)	3.5 - 5.5 bar
· Density at 20 °C:	ca. 0.59 g/cm ³
· 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 determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	8.5 %
VOC (EC)	97.80 %
Solids content:	2.2 %
· 9.2 Other information	No further relevant information available.
· Additional information	Vapors are heavier than air.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Risk of bursting at temperatures >50°C.
- **10.3 Possibility of hazardous reactions**
By use or incidental release the formation of explosive vapor/air mixtures is possible.
- **10.4 Conditions to avoid**
Temperatures >50°C
Avoid the use in the near of ignition sources.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Danger of toxic fluorine based pyrolysis products.
- **Additional information:** Stable for a storage time of min. 24 months

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:
106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
------------	----------	----------------

(Contd. on page 6)

Trade name: PTFE-Spray

(Contd. of page 5)

74-98-6 propane

Inhalative	LC50/4 h	> 20 mg/l (rat)
	LC50 /15 min	1,443 mg/l (rat)

64742-49-0 Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cycloalkanes

Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 2,800 mg/kg (rabbit)
Inhalative	LC50/4 h	> 23.3 mg/l (rat)

75-28-5 isobutane (<0,1% butadiene)

Inhalative	LC50/4 h	> 20 mg/l (rat)
------------	----------	-----------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** low
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.
- **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 12: Ecological information

 · **12.1 Toxicity**

 · **Aquatic toxicity:**
64742-49-0 Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cycloalkanes

EC 50 / 48h	3 mg / l (daphnia)
LC 50 / 96 h	> 13.4 mg / l (onc)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
 Harmful to aquatic organisms
 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
 empty cans: material recycling
 filled cans: remove in accordance with local regulations
 Hand over to hazardous waste disposers.

(Contd. on page 7)

Trade name: PTFE-Spray

(Contd. of page 6)

· **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 hazardous substances

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN1950

· **14.2 UN proper shipping name**

· **ADR** 1950 AEROSOLS
 · **IMDG** AEROSOLS
 · **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 2.5F Gases.
 · **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

· **Danger code (Kemler):** -
 · **EMS Number:** F-D,S-U
 · **Stowage Code** SW1 Protected from sources of heat.
 SW22 For AEROSOLS with a maximum capacity of 1 litre:
 Category A. For AEROSOLS with a capacity above 1 litre:
 Category B. For WASTE AEROSOLS: Category C, Clear
 of living quarters.
 · **Segregation Code** SG69 For AEROSOLS with a maximum capacity of 1 litre:
 Segregation as for class 9. Stow "separated from" class 1
 except for division 1.4.
 For AEROSOLS with a capacity above 1 litre:
 Segregation as for the appropriate subdivision of class 2.
 For WASTE AEROSOLS:
 Segregation as for the appropriate subdivision of class 2.

(Contd. on page 8)

Trade name: PTFE-Spray

(Contd. of page 7)

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** *Not applicable.*
- **Transport/Additional information:**
- **ADR**
- **Limited quantities (LQ)** *IL*
- **Excepted quantities (EQ)** *Code: E0*
Not permitted as Excepted Quantity
- **Transport category** *2*
- **Tunnel restriction code** *D*
- **Remarks:** *Transportation as "LIMITED QUANTITIES" according 3.4 ADR is possible.*
Sole marking: Sign for "Limited Quantities" (rhombus with two black edges)
Entry in the transportation document: Transportation according chapter 3.4 ADR
Tunnel category "E" in case of a load of 8000 kg (rgross weight) or more.
Hazardous goods under the transport regulations listed above may be subject to special regulations. For details please consult the relevant transport regulations
- **IMDG**
- **Limited quantities (LQ)** *IL*
- **Excepted quantities (EQ)** *Code: E0*
Not permitted as Excepted Quantity
- **UN "Model Regulation":** *UN 1950 AEROSOLS, 2.1*

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
- **Seveso category P3a** *FLAMMABLE AEROSOLS*
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** *150 t*
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** *500 t*
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

Class	Share in %
NK	8.5

- **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

SECTION 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.*
- H304 May be fatal if swallowed and enters airways.*

(Contd. on page 9)

Trade name: PTFE-Spray

(Contd. of page 8)

*H336 May cause drowsiness or dizziness.**H411 Toxic to aquatic life with long lasting effects.***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)**ICAO: International Civil Aviation Organisation**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 Harmonised 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)**DNEL: Derived No-Effect Level (REACH)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Gas 1: Flammable gases – Category 1**Aerosol 1: Aerosols – Category 1**Press. Gas C: Gases under pressure – Compressed gas**Press. Gas L: Gases under pressure – Liquefied gas**Flam. Liq. 2: Flammable liquids – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**Asp. Tox. 1: Aspiration hazard – Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3**** Data compared to the previous version altered.**