

Sprayflon Plus 3	Material Safety Data Sheet Per EC Directive 91/155/EC Amended by 2001/58/EC	Updated: 08.01.2007 Printed: 21.06.2007 Page: 1 of 8/ 00 Version: 03
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Trade name: Sprayflon Plus 3

1 Identification of Substance/Preparation and Company

- **Product specification:**
Trade name: Sprayflon Plus 3, 300 ml (aerosol can)

Product use:
 As universal lubricant, release and sliding agent for all branches of industry. It is used to lubricate threads, drawers, chutes, conveyor systems.
- **Manufacturer/supplier:** Saint-Gobain Performance Plastics Pampus GmbH
 Am Nordkanal 37
 D - 47877 Willich
 Phone: +49 (0) 2154 60 428
 Fax: +49 (0) 2154 60 465
 e-mail: oliver.otto@saint-gobain.com
- **Emergency Telephone No.:** +49 (0) 2154 60 428
 +44 (0) 1322 224726 | www.ami-con.co.uk

2 Composition/Information on Ingredients

- **Chemical name:**
 Aerosol preparation of PTFE polytetrafluoroethylene in hydrocarbons
- **Hazardous ingredients:**

Ingredient name	CAS No.	EC No.	% by weight	Symbol	R Clauses
Propane	74-98-6	200-827-9	30 - 50	F+	12
Butane	106-97-8	203-448-7	30 - 50	F+	12
Isobutane	75-28-5	200-857-2	5 - 10	F+	12
Titantetrabutanolate	5593-70-4	227-006-8	1 - < 5	Xi	10, 38, 41
2 - Propanol	67-63-0	200-661-7	1 - <15	F, Xi	11, 36, 67

- **Additional information:**
 The maximum workplace concentrations, as far as available, are given in section 8 below.
 For the text of R clauses see 16 below.

3 Hazards Identification

This preparation is classified as hazardous according to the criteria of the Dangerous Preparation Directive 1999/45/EC.

Classification: F+ Extremely flammable
 Xi Irritating

- **Information concerning particular hazards to man and environment:**
 - 12 Extremely flammable
 - 36 Irritating to the eyes
 - 38 Irritating to the skin
 - 41 Risk of serious damage to eyes
 - 67 Vapours may cause drowsiness and dizziness

Regarding the environment, see 12 below.

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4 First Aid Measures

- **General information:**
The propellants (propane/butane) are not known to have a specific toxic effect. Do not breath the spray jet.
- **After inhalation:**
Move victim to fresh air. Administer oxygen if breathing is difficult. Attention: Absolutely avoid inhaling the decomposition products of the active substance PTFE (>360 °C) as these are very toxic. Move victim to fresh air and rest. Seek medical attention.
- **After skin contact:**
May cause hypothermia due to the high evaporation coldness. Do not rub affected areas, but cover with sterile dressing. Flush with plenty of water.
- **After eye contact:**
Remove contact lenses. Wash with copious amounts of clean water for at least 10 minutes holding eyelid(s) open. Seek medical attention.
- **After ingestion:**
Seek medical attention. Do not induce vomiting.

5 Fire Fighting Measures

- **Extinguishing media:**
Cool exposed cans with water. Fight larger fires with water spray or foam.
Fight smaller fires with CO₂, dry chemicals or water spray.
- **Do not use:**
n.a.
- **Special risks posed by the substance, its combustion products or evolving gases:**
In case of fire, toxic pyrolysis products, fume, fluorinated hydrogen acid may be produced.
Risk of explosion after prolonged exposure to heat.
- **Fire fighting protective equipment:**
If larger quantities are released or burn, wear self-contained respirator (isolator) as PTFE decomposes into toxic substances. Wear full body suit.
- **Additional recommendations:**
- **Fire class: C** (gaseous pressurized substances)
In case of fire, notify fire-fighters that pressurized cans are available. If possible, move cans from fire area, may form explosive gas/air mixtures. Cool cans at risk with water spray. Fight fire from a safe distance. Do not allow to reach sewage. Risk of explosion. Contaminated extinguishing water must be disposed of in compliance with local regulations.

6 Accidental Release Measures

- **Personal precautions:**
Remove ignition sources, do not smoke. Ensure sufficient ventilation. NEVER direct the water jet towards the liquid. Remove victim to fresh air. If breathing has stopped, administer oxygen. Cover frozen body parts with sterile dressing. Seek medical attention. For further details see 8 below.
- **Environmental precautions:**
Avoid ignition sources and heat. Dam up if larger quantities are released. Do not allow to reach sewage. For further details see 7 below.
- **Cleaning/adsorption procedures:**
Remove PTFE residues by mechanical means. Supply plenty of fresh air if aerosol/gas is being evolved. Dispose adsorbed product per 13 below.

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7 Handling and Storage

- **Handling:**
Avoid handling preparations of this kind in case of known allergic reactions, asthma, repeated or chronic breathlessness.
- **Recommendations for safe handling:**
Observe the rules of TRG 300: Special requirements on aerosol cans.
Ensure sufficient ventilation and exhaust of work rooms. Also provide adequate ventilation of floor area as vapours/gases are heavier than air. Install gas detectors/indicators. Prevent entry of gas into funnels and ducts.
- **Recommendations for fire and explosion control:**
Install a fire-extinguishing blanket and extinguishers of the fire class that fits the combustible materials in the environment, in a visible place. Use CO₂ and dry powder extinguishers with gaz nozzle.
- **Storage:**
Mark containers legibly and durably. If stored and hold ready for use in the factory department, keep container closed and in a cool well ventilated place. Do not store in or near escape routes and workrooms.
Can content: 300 ml
Can type/material: Tinplate cans
Storage temperature (min): 10 °C
Storage temperature (max): 25 °C
Storage class: 2B, aerosol cans
Remark: Observe the VCI "Concept for storing chemicals together"

8 Exposure Controls / Personal Protection

- **Substances with workplace exposure limits:**

Identity of Substance			Workplace exposure limit		Peak limit	Remarks
Designation	EC No.	CAS No.	ml/m3 (ppm)	mg/m3	Excedence factor	
Propane	200-827-9	74-98-6	1000	1800	4(II)	DFG
Butane	203-448-7	106-97-8	1000	2400	4(II)	DFG
2 - Propanol	200-661-7	67-63-0	200	500	2(II)	DFG, Y
Isobutane	200-857-2	75-28-5	1000	2400	4(II)	DFG

- **Additional information:**
The values listed were taken from the TRG 900/TRGS 901 rules valid as of the date of this MSDS, or from the BGIA GESTIS materials data base.
- **Personal protection:**
- **Respiratory protection:**
Only if ventilation is insufficient or in case of fire when PTFE may decompose into toxic substances.
Propane/butane/acetone aerosol mist: Mainly due to the acetone component, the vapours may cause moderate irritation of the mucuous membrane, or a narcotic effect in high concentrations. After ingestion, may cause gastrointestinal disturbances.
Type of mask: Full mask of class 1 (DIN EN 141) or half/quarter mask (DIN EN 140)
Respirator: Gas filter AX – group 2 (organic gases and vapours) (DIN EN 371)

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Colour : Brown

Filters must only be used in the "as supplied" condition. Repeated use is admitted only within a single workshift (of maximum 8 hours) if the filters' maximum period of use is not exceeded. Do not use AX filters for mixtures of low-boiling substances or other organic compounds.

Remark: Observe BGR 190 (Use of respirators).

- Hand protection:

Suitable protective gloves (DIN EN 511 – coldness) recommended. Preventive skin protection required. Gloves out of leather or thick cloth.

Remark: Observe BGR 195 (Use of protective gloves).

- Eye protection:

Wear suitable eye protection.

When handling compressed gas, wear at least safety glasses with side protection (DIN EN 166).

When handling liquified gas, wear safety splash goggles and face shield.

- Body protection:

When handling pressurized gas cylinders, wear protective shoes (e.g. safety shoes to DIN EN 344) and flame-retardant antistatic clothing.

- Other precautionary and hygienic information:

Ensure good ventilation in work areas. Do not eat, drink, smoke or snuff in work areas. After skin contact carefully clean with water and soap or suitable detergent. Do not inhale gas/vapors/aerosols. The minimum precaution standards for handling substances at work are given in TRGS (Technical rules for hazardous substances) 500.

9 Physical and Chemical Properties:

- **Physical state:** Aerosol
- **Colour :** Light-coloured
- **Odour :** Typical

	Value/range	Unit	Method
pH value	Not determinable	-	-
Boiling point/range	-42 to 0, propellant	°C	Literature value : ICSC 0087
Flash point	<-21 (propane/butane)	°C	Literature value : ICSC 0319 ; ICSC 0232
Flammability (solid, gaseous)	yes	-	-
Ignition temperature	450 – propane	°C	Literature value : ICSC 0319
	365 – butane	°C	Literature value : ICSC 0232
Explosion risk			
- lower limit	1.8 butane/2.1 propane	vol. %	Literature value : ICSC 0232 ; ICSC 0319
- upper limit	8.4 butane/9.5 propane	vol. %	Literature value : ICSC 0232 ; ICSC 0319
Fire-promoting properties	-		
Vapour pressure	840 propane	kPa	Literature value : ICSC 0319
	213.7 butane	kPa	Literature value : ICSC 0232
Solubility in water	Insoluble	-	-
Viscosity	No data available	-	-

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10 Stability and Reactivity

- **Conditions to avoid:**
Under recommended storage and handling conditions (See 7 above). Do not spray onto burning surfaces or into open fire. Risk of bursting by increased pressure. Open fire, ignition sources, electrostatic discharge.
- **Incompatibilities:**
Avoid contact with other chemicals. Avoid contact with oxidants. Avoid contact with strong acids. Amines. Ammonia. See also 7 above.
- **Hazardous decomposition products (PTFE):**
PTFE decomposes into fluorolefines, carbonyl fluoride und hydrogen fluoride. No decomposition products are produced up to approximately 230 °C. Significant decomposition starts at temperatures >360 °C. In case of fire toxic pyrolysis products may form. See also 5 above.

11 Toxicology Information

- **Practical experience:**
There are no known toxic effects under normal conditions of use.
- **Other observations:**
Freezing and head-ache may occur.
- **Other toxicological information:**
No product analysis was made. The preparation was classified by the conventional method (calculation method of EC Directive 1999/45/EC) and in consideration of the toxicological risks. (See also 2 and 15).

12 Ecology Information

- **Water hazard class:**
1 – low hazard to water (VwVwS – 17.05.99), index 135.
- **Other ecological information:**
When rated by the conventional method of the Dangerous Preparations Directive (1999/45/EC), the preparation was classified as not being dangerous for the environment.

13 Disposal Considerations

- **Disposal of waste product:**
Disposal must conform to Directives 75/442/EC and 91/689/EC on waste and on (empty) aerosol cans, consisting of tin plate with valve-seat insert and ascending pipe of plastic material.
Recommendation:
Cans must be entirely empty. Follow local regulations.
Waste disposal codes:
According to the European Waste Catalogue, waste disposal codes/designations are to be fixed under industry-specific and process-specific aspects.
07 07 04 – Other organic solvents, washing liquids and mother liquors
16 05 04 – Gases in pressure containers (including halons) containing dangerous substances
20 01 99 – Other fractions not otherwise specified

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- **Disposal of contaminated packaging:**
Recommendation:
 Packaging containers must be entirely empty. Follow local regulations.
Waste disposal codes:
15 01 04 – Metallic packaging (empty cans)
15 01 11 – Metallic packaging containing a dangerous solid porous matrix, including empty pressure containers

14 Transport Information

Transportation must comply with ADR (road), RID (train), IMDG (sea) et ICAO/IATA (air).

Land transport ADR/RID and GGVS/GGVE :

ADR/RID class: 2
 ID number/letter: 5F
 UN number: 1950
 Product name: Compressed gas container
 Correct technical name: Aerosols
 Packaging group: n.a.
 Information for transport documents and packaging:
 Volume or mass: 300 ml
 Hazard label: 2.1
 Packaging code or instructions: P204
 P204/LQ2
 MP9

Sea transport IMDG/GGVSee

IMDG/GGVSee Class: 2.1
 UN number: 1950
 Product name: Compressed gas container
 Correct technical name: Aerosols, limited quantities
 Packaging group: n.a.
 EmS number: EmS Fire: F-D
 EmS Spill: S-U
 Marine Pollutant: n.a.
 Remark: Compressed gas


Air transport ICAO-TI et IATA-DGR

ICAO/IATA class: 2.1
 UN number: 1950
 Packaging group: n.a.
 Correct technical name: Aerosols, flammable
 Additional remarks:
 Hazard label: Flammable Gas
 Packing instruction number: Passenger: 203
 Cargo: 203


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15 Regulatory Information

- Labeling according to EC Directives 1999/45/EC and 67/548/EC
- Code letter, hazard symbol and hazard description of the product:



F+ Extremely flammable



Xi Irritating
- **Hazard-defining components for labeling:**
- **R Clauses:**
 - 12 Extremely flammable
 - 36 Irritating to eyes
 - 38 Irritating to skin
 - 67 Vapours may cause drowsiness and dizziness
- **S Clauses:**
 - (2) Keep out of the reach of children
 - 9 Keep container in a well ventilated place
 - 16 Keep away from sources of ignition – No smoking
 - 23 Do not breathe aerosol
 - 24/25 Avoid contact with skin and eyes
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
 - 33 Take precautionary measures against static discharges
 - 39 Wear eye/face protection
- **Special provisions concerning the labeling of certain preparations:** n.a.
- **National regulations:**
- **Observe the remarks regarding occupational limitations:** Young workers (§ 22 of the directive on the protection of young people at work)
- **StörfallIV** (incident related directive) (12.BImSchV): App. 2, No. 1 Combustible gases
- **VbF:** All
- **Technical instructions on Air Quality (TA-Luft – 2002):**
 - Section 5.2.6 (Gaseous organic substances) class II
 - Mass flow rate: 0.50 kg/h or mass concentration: 0.10 g/m³ must not be exceeded
- **Classification acc. to the VOC directives:** 95 %
- **Water hazard class:** 1 – low hazard to water (Index 135, App. 1 of VwVwS – 17.05.99).
- **Other regulations, restrictions or prohibitions:**
 - Technical rules for hazardous substances TRGS 300** – Safety Techniques
 - Observe the regulations for the prevention of industrial accidents and the medical principles regarding work.

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16 Other Information

- **Data sheet established by:** QEHS
- **Contact:** Oliver Otto - phone: +49 (0) 2154 / 60-428

Text of R Clauses listed under 2 above:

- 12 Extremely flammable
- 36 Irritating to eyes
- 38 Irritating to skin
- 67 Vapours may cause drowsiness and dizziness

- **Training recommendations:**

First aid training

- **Recommended restrictions of use:**

Professional/industrial use

- **Data sources:**

The data were taken from original literature

<http://www.baua.de/de/Themen-von-A-Z/Gefahrstoffe/Gefahrstoffe.html?nnn=true>;

<http://www.hvbg.de/d/bia/fac/isi-db/index.html>;

<http://www.umweltbundesamt.de/wgs/mysql-wgk.html>;

<http://www.vci.de>)

and were completed with practical experience.

- **Further information**

The details contained in this sheet are based on the current state of knowledge and comply with the national and EC legislation. They are not meant to assure specific product properties.