Safety Data Sheet

according to Regulation (EC) No. 1907/2006 – DE

iwis VP8 FoodPlus Spray

– Revision Date: 23.04.2018 –

iwis antriebssysteme wir bewegen die welt

Section 1

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

1.1 Product identifier

Product name	iwis VP8 FoodPlus Spray
Item number	40011279
NSF registration number	157999

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

Use of the Substance/Mixture	Lubricant spray
Recommended restrictions on use	Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company	**iwis antriebssysteme GmbH & Co. KG** Albert-Roßhaupter-Straße 53 / 81369 München Tel. +49 89 76909-1500 Fax +49 89 76909-1198
E-mail address of person responsible for the SDS National contact	sales@iwis.com

1.4 Emergency telephone number

Emergency telephone number	+49 551 19240 (24 hrs)

Section 2

Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)	
Aerosols, Category 1	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)
Hazard pictograms

Signal word: Danger

Hazard statements:
H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated.

Precautionary statements

Prevention

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.

Storage

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

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumula-tive and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3
Composition/information on ingredients

3.2 Mixtures

Chemical nature: Active substance with propellant
Synthetic hydrocarbon oil
PTFE

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
Substances with a workplace exposure limit				
butane	106-97-8 203-448-7 601-004-00-0	Flam. Gas1; H220 Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	>= 30 - < 50
propane	74-98-6 200-827-9 601-003-00-5	Flam. Gas1; H220 Press. GasCompr. Gas; H280	Note U (table 3.1),	>= 10 - < 20
isobutane	75-28-5 200-857-2 601-004-00-0	Flam. Gas1; H220 Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	>= 1 - < 10

For explanation of abbreviations see section 16.

Section 4
First aid measures

4.1 Description of first aid measures

If inhaled

Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

Remove contaminated clothing. If irritation develops, get medical attention. Wash off with soap and plenty of water. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.

If swallowed

Move the victim to fresh air. Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

Inhalation may provoke the following symptoms: unconsciousness, dizziness, drowsiness, deadache, nausea, tiredness

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	Treat symptomatically.

Section 5
Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	ABC powder
Unsuitable extinguishing media	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	Fire may cause evolution of: carbon oxides, halogenated compounds Fire Hazard Do not let product enter drains. Contains gas under pressure; may explode if heated. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

5.3 Advice for firefighters

Special protective equipment for firefighters	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.
Further information	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Cool containers/tanks with water spray.

Section 6
Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Refer to protective measures listed in sections 7 and 8. Only qualified personnel equipped with suitable protective equipment may intervene.

6.2 Environmental precautions

Environmental precautions	Try to prevent the material from entering drains or water courses. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal. Non-sparking tools should be used.

6.4 Reference to other sections

For personal protection see section 8.

Section 7
Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	Do not use in areas without adequate ventilation. Do not breathe vapours or spray mist. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes. For personal protection see section 8. Keep away from fire, sparks and heated surfaces. Smoking, eating and drinking should be prohibited in the application area. Wash hands and face before breaks and immediately after handling the product. Do not ingest. Do not use sparking tools.

	These safety instructions also apply to empty packaging which may still contain product residues. Pressurized container: protect from sunlight and do not ex-pose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
Hygiene measures	Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Store in accordance with the particular national regulations.
Storage class (TRGS 510)	2B, Aerosol cans and lighters

7.3 Specific end use(s)

Specific use(s)	Consult the technical guidelines for the use of this substance/ mixture.

Section 8
Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
butane	106-97-8	AGW	1.000 ppm 2.400 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
propane	74-98-6	AGW	1.000 ppm 1.800 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
isobutane	75-28-5	AGW	1.000 ppm 2.400 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			

8.2 Exposure controls

Engineering measures	Use only in an area equipped with explosion proof exhaust ventilation. Handle only in a place equipped with local exhaust (or other appropriate exhaust).
Personal protective equipment	
Eye protection	Safety glasses with side-shields conforming to EN166
Hand protection	Material: Fluorinated rubber Protective index: Class 1 Remarks: For prolonged or repeated contact use protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
Respiratory protection	Respirator with combination filter for vapour/particulate (EN 141). Short term only.
Filter type	ABEK-P3-filter Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Protective measures	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace.

Section 9
Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	aerosol
Colour	white, beige
Odour	characteristic
Odour Threshold	No data available
pH	Not applicable

Melting point/range	No data available
Boiling point/boiling range	No data available
Flash point	-97 °C (Method: Abel-Pensky)
Evaporation rate	No data available
Flammability (solid, gas)	Extremely flammable aerosol.
Upper explosion limit	10,9 %(V)
Lower explosion limit	1,5 %(V)
Vapour pressure	4.500 hPa (20 °C)
Relative vapour density	No data available
Density	0,68 g/cm³ (20 °C)
Bulk density	No data available
Solubility(ies)	Water solubility: insoluble
	Solubility in other solvents: No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, dynamic: No data available
	Viscosity, kinematic: ‹ 20,5 mm2/s (40 °C)
Explosive properties	Not explosive
Oxidizing properties	No data available

9.2 Other information

Sublimation point	No data available
Metal corrosion rate	Not corrosive to metals
Self-ignition	not auto-flammable

Section 10
Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid	Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid	Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products	›280 °C danger of forming toxic fluorine-containing pyrolysis products.

Section 11
Toxicological information

11.1 Information on toxicological effects

ACUTE TOXICITY

Product

Acute oral toxicity	Remarks: This information is not available.
Acute inhalation toxicity	Symptoms: Inhalation may provoke the following symptoms: Respiratory disorder
Acute dermal toxicity	Remarks: This information is not available.

Components

butane	Acute inhalation toxicity: LC50 (Rat): 658 mg/l exposure time: 4 h, test atmosphere: gas
isobutane	Acute inhalation toxicity: LC50 (Rat): 658 mg/l exposure time: 4 h, test atmosphere: gas

Skin corrosion/irritation

Product	Remarks: This information is not available.

Serious eye damage/eye irritation

Product	Remarks: Contact with eyes may cause irritation.

Respiratory or skin sensitisation

Product	Remarks: This information is not available.

Germ cell mutagenicity

Product: Genotoxicity in vitro	Remarks: No data available
Product: Genotoxicity in vivo	Remarks: No data available

Carcinogenicity

Product	Remarks: No data available

Reproductive toxicity

Product: Effects on fertility	Remarks: No data available
Product: Effects on foetal development	Remarks: No data available

Repeated dose toxicity

Product	Remarks: This information is not available.

Aspiration toxicity

Product	This information is not available.

Further information

Product	Remarks: Information given is based on data on the components and the toxicology of similar products.

Section 12
Ecological information

12.1 Toxicity

Product

Toxicity to fish	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	Remarks: No data availabler
Toxicity to algae	Remarks: No data available
Toxicity to microorganisms	Remarks: No data available

12.2 Persistence and degradability

Product

Biodegradability	Remarks: No data available
Physico-chemical removability	Remarks: No data available

12.3 Bioaccumulative potential

Product

Bioaccumulation	Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Components

butane	Partition coefficient: n-octanol/water log Pow: 2,89, method: OECD Test Guideline 107
propane	Partition coefficient: n-octanol/water log Pow: 2,36
isobutane	Partition coefficient: n-octanol/water log Pow: 2,88 method: OECD Test Guideline 107

12.4 Mobility in soil

Product

Mobility	Remarks: No data available
Distribution among environmental compartments	Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product

Assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product

Additional ecological information	No information on ecology is available.

Section 13
Disposal considerations

13.1 Waste treatment methods

Product	In accordance with local and national regulations. Waste codes should be assigned by the user based on the application for which the product was used.
Contaminated packaging	Offer empty spray cans to an established disposal company. Pressurized container: Do not pierce or burn, even after use.

Section 14
Transport information

14.1 UN number

ADR	UN 1950
IMDG	UN 1950
IATA	UN 1950

14.2 UN proper shipping name

ADR	Aerosols
IMDG	Aerosols
IATA	Aerosols, flammable

14.3 Transport hazard class(es)

ADR	2
IMDG	2.1
IATA	2.1

14.4 Packing group

ADR

Packing group	Not assigned by regulation
Classification Code	5F
Labels	2.1
Tunnel restriction code	(D)

IMDG

Packing group	Not assigned by regulation
Labels	2.1
EmS Code	F-D, S-U

IATA (Cargo)

Packing instruction (cargo aircraft)	203
Packing instruction (LQ)	Y203
Packing group	Not assigned by regulation
Labels	Flammable Gas

IATA (Passenger)

Packing instruction (passenger aircraft)	203
Packing instruction (LQ)	Y203
Packing group	Not assigned by regulation
Labels	Flammable Gas

14.5 Environmental hazards

ADR

Environmentally hazardous	no

IMDG

Marine pollutant	no

IATA (Passenger)

Environmentally hazardous	no

IATA (Cargo)

Environmentally hazardous	no

14.6 Special precautions for user

No special precautions required.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks	Not applicable for product as supplied.

Section 15
Regulatory information

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

REACH – Candidate List of Substances of Very High Concern for Authorisation (Article 59).	This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
REACH – List of substances subject to authorisation (Annex XIV)	Not applicable
Regulation (EC) No 1005/2009 on substances that dep-lete the ozone layer	Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants	Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	Not applicable
REACH – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances			
		Quantity 1	**Quantity 2**
8	Extremely flammable	10 t	50 t
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.			
P3a	FLAMMABLE AEROSOLS	150 t	500 t
P2			
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alterna-tive fuels serving the same purposes and with similar properties as regards flammability and environ-mental hazards as the products referred to in points (a) to (d)	2.500 t	25.000 t

Water contaminating class (Germany)	WGK 1 slightly water endangering Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany)	Total dust others: 1,55 % Inorganic substances in powdered form: Not applicable Inorganic substances in vapour or gaseous form: Not applicable Organic Substances: others: 98,38 % Carcinogenic substances: Not applicable Mutagenic: Not applicable Toxic to reproduction: Not applicable
Volatile organic compounds	Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 50,25 % Remarks: VOC content excluding water
Other regulations	Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment

This information is not available.

Section 16
Other information

Full text of H-Statements

H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

Full text of other abbreviations

Note C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
Note U (table 3.1)	When put on the market gases have to be classified as “Gases under pressure”, in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisa-tion for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioac-cumulative.

Further information

Classification of the mixture

Aerosol 1	H222, H229
Classification procedure	Based on product data or assessment