

SAFETY DATA SHEET



according to Regulation (EC) No. 1907/2006 (REACH)

Florin IK Spray

Article No.	0086	Florin IK-Spray	Issue date:	07.09.20
Version		9 (03.09.20)	Page	1/ 10

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

1.1 Product identifier

Trade name Florin IK Spray

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

General use

release products

Uses advised against

1.3 Details of the supplier of the safety data sheet

Flore-Chemie GmbH
Sauerlandstraße 7
D - 56761 Masburg
info@flore.de

1.4 Emergency telephone number

Emergency Information

Phone

FLORE-Chemie GmbH / Tel. +49 (0) 2653 91459 12
Monday to Thursday: 8 a.m. - 5 p.m.
Friday: 8.00 a.m. - 2.30 p.m.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

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

Asp. Tox. 1; H304 May be fatal if swallowed and enters airways.

Eye Irrit. 2; H319 Causes serious eye irritation.

Flam. Aerosol 1; H222 Extremely flammable aerosol.

Flam. Aerosol 1; H229 Pressurised container: May burst if heated.

STOT RE 2; H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is con

2.2 Label elements

Labelling



Signal word

Danger

Hazard components for labelling

Butane - propane - zinc dialkyldithiophosphate - Highly refined mineral oil - Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cycl. compounds, < 2% aromates - Hydrocarbon mixture, liquid - Hydrocarbon mixture, liquid

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H412 Harmful to aquatic life with long lasting effects.

Safety precautions

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.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P314 Get medical advice/attention if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3 Other hazards

No information available.

SECTION 3: Composition / information on ingredients

3.1 Substances

Chemical characterisation

Preparations of hydrocarbons / petroleum products with additives.

CAS-Number	---
EINECS / ELINCS / NLP	---
EU index number	---
Customs tariff number	---
REACH registration No.	---
RTECS-no.	---
Hazchem-Code	---
CI-Number	---

3.2 Mixtures

Substance 1

Hochraffiniertes Mineralöl: 45 % - 50 %
CAS-Nummer: 64742-56-9
EINECS / ELINCS / NLP: 265-159-2
REACH-Registrierungsnr.: 01-2119480132-48

Einstufung gemäß EG-Verordnung 1272/2008 (CLP):
Asp. Tox. 1; H304

Substance 3

Kohlenwasserstoffe, C11-C14, N-Alkane, Iso-Alkane, cyclische Verbindungen, < 2% Aromaten: 10 % - 15 %
CAS-Nummer: 64742-47-8
EINECS / ELINCS / NLP: 926-141-6
REACH-Registrierungsnr.: 01-2119456620-43

Einstufung gemäß EG-Verordnung 1272/2008 (CLP):
Asp. Tox. 1; H304

Substance 5

Propan: 1 % - 10 %
CAS-Nummer: 74-98-6
EU-Indexnummer: 601-003-00-5
EINECS / ELINCS / NLP: 200-827-9
REACH-Registrierungsnr.: 01-2119486944-21-xxxx

Einstufung gemäß EG-Verordnung 1272/2008 (CLP):
Compr. Gas; H280 / Flam. Gas 1; H220

Substance 7

Substance 2

Butan: 20 % - 25 %
CAS-Nummer: 106-97-8
EU-Indexnummer: 601-004-00-0
EINECS / ELINCS / NLP: 203-448-7
REACH-Registrierungsnr.: 01-2119474691-32-xxxx

Einstufung gemäß EG-Verordnung 1272/2008 (CLP):
Compr. Gas; H280 / Flam. Gas 1; H220

Substance 4

Kohlenwasserstoffgemisch, flüssig: 1 % - 10 %
EINECS / ELINCS / NLP: 919-164-8
REACH-Registrierungsnr.: 01-2119473977-17

Einstufung gemäß EG-Verordnung 1272/2008 (CLP):
Aquatic Chronic 3; H412 / Asp. Tox. 1; H304 / nicht erforderlich; EUH066 / STOT RE 1; H372

Substance 6

Zinkdialkyldithiophosphat: <= 1 %
CAS-Nummer: 85940-28-9
EINECS / ELINCS / NLP: 288-917-4

Einstufung gemäß EG-Verordnung 1272/2008 (CLP):
Aquatic Chronic 2; H411 / Eye Dam. 1; H318 / Skin Irrit. 2; H315

2,6-Di-tert-butyl-p-kresol: <= 1 %
CAS-Number: 128-37-0
EINECS / ELINCS / NLP: 204-881-4
REACH registration No.: 01-2119565113-46
Classification according to Directive 67/548/EEC or 1999/45/EC:
Nature of Hazard: N / R phrase(s): 50/53
Classification according to EC regulation 1272/2008 (CLP):
Aquatic Acute 1; H400 / Aquatic Chronic 1; H410

Additional information

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of inhalation

No special measures are required.

In case of skin contact

Thoroughly wash skin with soap and water. Change contaminated clothing. Immediately get medical attention.

After eye contact

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Seek medical attention if irritation persists.

After swallowing

Immediately get medical attention. Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing material as appropriate for the surrounding area.

Extinguishing media which must not be used for safety reasons

5.2 Special hazards arising from the substance or mixture

Vapours can form explosive mixtures with air.

5.3 Advice for firefighters

Special protective equipment for firefighters

Wear self-contained breathing apparatus.

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 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Do not breathe gas/fumes/vapour/spray.

6.2 environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered

material as prescribed in the section on waste disposal.

Additional information

6.4 Reference to other sections

Disposal: see section 13 SECTION 7: Handling and storage SECTION 8: Exposure controls/personal protection

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Precautions against fire and explosion

Take action to prevent static discharges. Keep away from sources of ignition. Vapours can form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers

Observe TRG 300 No. 2.8 - 2.9 and 6.1 - 6.4.4. Do not expose to temperatures above 50 °C. Warehousing of more than 500 aerosol cans must be notified according to § 24 of the German Pressure Vessel Regulation. Keep only in the original container. Protect from heat and direct sunlight. Store in a cool dry place. Vorbeugende Maßnahmen gegen elektrostatische Aufladungen treffen.

Hints on joint storage

None known

Storage class

2B

Further details

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DEU	WEL (Europe)	600,000	mg/m ³	Kohlenwasserstoffgemische, flüssig
DEU	WEL-STEL (vapour)	10,000	mg/m ³	Ölnebel

106-97-8 Butane

D	MWC (TRGS 900)	1.000,000	ml/m ³ = pp	4 (II);DFG
D	MWC (TRGS 900)	2.400,000	mg/m ³	-

74-98-6 propane

D	MWC (TRGS 900)	1.000,000	ml/m ³ = pp	4 (II);DFG
D	MWC (TRGS 900)	1.800,000	mg/m ³	-

128-37-0 2,6-Di-tert-butyl-p-kresol

DEU	WEL	10,000	mg/m ³	E, 4 (II)
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8.2 Exposure controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Occupational exposure controls

Respiratory protection

Use respiratory protection whenever ventilation is inadequate.

Hand protection

protective gloves Material nitrile DIN EN 374, layer thickness 1,5 mm, penetration time > 480 min Material Viton DIN EN 374, layer thickness 0,7 mm, penetration time > 480 min Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection

Wear eye/face protection.

Body protection

Wear suitable protective clothing.

General protection and hygiene measures

When using do not eat, drink, smoke, sniff. Wash hands and face before breaks and after work and take a shower if necessary. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

Form Aerosol
Colour clear
Odour characteristic

	min	max	
Initial boiling point and boiling range	---	---	
Melting point/freezing point	---	---	
Flash point/flash point range	---	---	
Flammability	---	---	
Ignition temperature	---	---	
Auto-ignition temperature	---	---	not oxidising
Explosion limits	0,6 Vol-%	7 Vol-%	
Refraction index	---	---	---

Partition coefficient: n-octanol/water ---
The product has not been tested.

Danger of explosion ---

Vapour pressure < 1 hPa --- ---

Density 0,84 g/ml --- ---

PH value --- --- --- ---

Viscosity dynamic of --- --- ---
Viscosity dynamic up to --- --- ---

Viscosity kinematic of 15 mm²/s --- ---
Viscosity kinematic up to --- --- ---

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2 Chemical stability

Product is stable under normal storage conditions.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep at temperature not exceeding 50 °C. Heating causes rise in pressure with risk of bursting.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No known hazardous decomposition products.

Toxicological tests

64742-56-9 Highly refined mineral oil

oral	LD50	Rat		5000,000	mg/kg	-
dermal	LD50	Rabbit		5000,000	mg/kg	-

Toxicological tests

106-97-8 Butane

Acute toxicity, inhalative	LC50	Rat		658000,000	mg/m ³	4h
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Toxicological tests

64742-47-8 Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cycl. compounds, < 2% aromates

oral	LD50	Rat		5000,000	mg/kg	-
inhalative	LC50	Rat		5000,000	mg/l	-
dermal	LD50	Rabbit		5000,000	mg/kg	-

Toxicological tests

Hydrocarbon mixture, liquid

oral	LD50	Rat		5000,000	mg/kg	-
inhalative	LC50	Rat		13,100	mg/l	4h
dermal	LD50	Rabbit		2920,000	mg/kg	-

Toxicological tests

85940-28-9 zinc dialkyldithiophosphate

oral	LD50	Rat		2000,000	mg/kg	-
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Toxicological tests

128-37-0 2,6-Di-tert-butyl-p-kresol

oral	LD50	Rat		2930,000	mg/kg	-
dermal	LD50	Rabbit		2000,000	mg/kg	-

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

In case of inhalation

After swallowing

In case of skin contact

After eye contact

Practical experience

General remarks

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture

Ecotoxicological effects

64742-56-9 Highly refined mineral oil

acute fish toxicity	LC50	Daphnia magna (Big water)		100,000	mg/l	-
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Ecotoxicological effects

Hydrocarbon mixture, liquid

acute fish toxicity	LC50	Oncorhynchus mykiss		100,000	mg/l	96h
Aquatic toxicity	EC50	Daphnia magna (Big water)		22,000	mg/l	48h

Ecotoxicological effects

128-37-0 2,6-Di-tert-butyl-p-kresol

Bacterial toxicity:	not required	not required		0,500	mg/l	-
acute fish toxicity	LC50	Carassius auratus (goldfi)		0,200	mg/l	96h
Acute (short-term) algae toxicity	ErC50:	Algae		0,800	mg/l	96h

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Water Hazard Class 2
WGK catalog number ---
General information

12.2 Persistence and degradability

Degree of elimination

The product has not been tested.

Further details

Oxygen demand

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)

Partition coefficient: n-octanol/water

The product has not been tested.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number

120107 ---

Recommendation

Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Contaminated packaging

Waste key number

Recommendation

Do not dispose of with household waste. Handle contaminated packages in the same way as the substance itself.

Additional information

SECTION 14: Transport information

14.1 UN number

1950

14.2 UN proper shipping name

ADR, ADN AEROSOLS
IMDG, IATA Aerosols

14.3 Transport hazard class(es)

ADR, ADN 2,5
 F
 IMDG 2
 IATA 2

14.4 Packing group

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14.5 Environmental hazards

Marine Pollutant - IMDG no
 Marine Pollutant - ADN no

14.6 Special precautions for user

Land transport (ADR/RID)

Code: ADR/RID 5F
 Kemmler-number 20
 Hazard label ADR 2.1
 Limited quantities 1L
 Contaminated packaging: Instructions ---
 Contaminated packaging: Special provisions ---
 Special provisions for packing together ---
 Portable tanks: Instructions ---
 Portable tanks: Special provisions ---
 Tank coding ---
 Tunnel restriction (D)
 Remarks ---
 EQ ---
 Special provisions ---
 Danger releasing substance BUTANE PROPANE

Inland waterway craft (ADN)

Hazard label ---
 Limited quantities ---
 Transport permitted ---
 Equipment necessary ---
 Ventilation ---
 Remarks ---
 EQ ---
 Special provisions ---

Sea transport (IMDG)

EmS ---
 Special provisions ---
 Limited quantities ---
 Contaminated packaging: Instructions ---
 Contaminated packaging: Special provisions ---
 IBC: Instructions ---
 IBC: Provisions ---
 Tank instructions IMO ---
 Tank instructions UN ---
 Tank instructions Special provisions ---
 Stowage and segregation ---
 Properties and observations ---
 Remarks Outer packagings (boxes or cartons) must at least conform to the Packing Group II requirements.
 EQ ---

Air transport (IATA-DGR)

Hazard ---
 Passenger ---
 Passenger LQ ---
 Cargo ---
 ERG ---

Remarks ---
EQ ---
Special Provisioning ---

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SECTION 15: Regulatory information

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

National regulations

Europe

Contents of VOC [%] 38,63 %
Contents of VOC ---

[g/L]

Further regulations, limitations and legal requirements

The product is classified and labelled according to EC directives or corresponding national laws.

Germany

Storage class ---
Water Hazard Class 2
WGK catalog number ---
Incident regulation ---
Information on working limitations ---

Further regulations, limitations and legal requirements
observe TRG 300!

Denmark

Further regulations, limitations and legal requirements

Hungary

Further regulations, limitations and legal requirements

Great Britain

Further regulations, limitations and legal requirements

Switzerland

Contents of VOC [%]
38,63 %
Further regulations, limitations and legal requirements

USA

Further regulations, limitations and legal requirements

Federal Regulations

State Regulations

Japan

Further regulations, limitations and legal requirements

Canada

Further regulations, limitations and legal requirements

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Further information

Hazard statements (CLP)	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H372 Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard). H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard). H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH066 Repeated exposure may cause skin dryness or cracking.
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Further information

Literature

The information is based on the current status of our knowledge and experience. The safety data sheet describes products with regard to their safety requirements. These descriptions do not constitute warranted characteristics.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Reason of change

New address and contact details

Additional information
