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

1.1 Product identifier

Trade name: Stiefel RP1 Spray

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

General use: Insect repellents

1.3 Details of the supplier of the safety data sheet

Company name: Innopha GmbH
Street/POB-No.: Walther Nothelfer Str. 7
Postal Code, city: 66687 Wadern Lockweiler
Germany
WWW: www.innopha.de
E-mail: info@innopha.de
Telephone: +49 (0)6871 92020
Telefax: +49 (0)6871 920229

Department responsible for information:
Herr Christian Jung
E-mail: info@innopha.de
Telephone: +49 (0)6871 92020
Telefax: +49 (0)6871 920229

1.4 Emergency telephone number

GIZ-Nord, Göttingen, Germany,
Telephone: +49 551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Flam. Liq. 3; H226 Flammable liquid and vapour.

2.2 Label elements

Labelling (CLP)

Signal word: **Warning**

Hazard statements: H226 Flammable liquid and vapour.

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.
P243	Take action to prevent static discharges.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to hazardous or special waste collection point.

Special labelling

Text for labelling: Contains 80 g/L Saltidin

Use biocides safely. Always read the label and product information before use.

2.3 Other hazards

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may have a narcotic effect.

Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Aqueous solution with Saltidin (Icaridin) 8%

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119457610-43-xxxx EC No. 200-578-6 CAS 64-17-5	Ethanol	25 - 50 %	Flam. Liq. 2; H225.
REACH 01-2119457558-25-xxxx EC No. 200-661-7 CAS 67-63-0	Isopropyl alcohol	< 3.5 %	Flam. Liq. 2; H225. Eye Irrit. 2; H319. STOT SE 3; H336.

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation: Move victim to fresh air. Seek medical treatment in case of troubles.

Following skin contact: Remove residues with water. Change contaminated clothing. In case of skin reactions, consult a physician.

After eye contact: With eyelids open, wash out eyes for several minutes under flowing water. Remove contact lenses, if present and easy to do. Continue rinsing.
In case of troubles or persistent symptoms, consult an opthalmologist.

After swallowing: Do not induce vomiting without medical assistance. Immediately get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The product can cause irritation of the eyes.
Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

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:

Extinguishing powder, water spray jet or carbon dioxide.
In case of large fires: alcohol resistant foam or water spray jet.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapour. On contact with air, potentially explosive mixtures may develop.
Hazardous vapours may form during fires.
Furthermore, there may develop: nitrogen oxides (NOx), Pyrolysis products, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Hazchem-Code: •3Y

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.
Move undamaged containers from immediate hazard area if it can be done safely.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Do not allow fire water to penetrate into surface or ground water.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Avoid contact with skin and eyes.
Eliminate all ignition sources if safe to do so. Provide adequate ventilation.
Wear appropriate protective equipment. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Beware of reignition. Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapour/aerosol.
Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Take off immediately all contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation. Avoid the formation of aerosol.
When using do not eat, drink or smoke. Wash hands thoroughly after handling.
When handling large quantities, supply emergency spray.

Precautions against fire and explosion:
Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:
Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position. Explosion protection required.
Recommended storage temperature: less than 50 °C

Hints on joint storage: Do not store together with combustible or self-igniting materials or any highly flammable solids.
Do not store together with strong oxidizing agents, peroxides, acids, alkali metals.
Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
64-17-5	Ethanol	Great Britain: WEL-TWA Ireland: 15 minutes	1920 mg/m³; 1000 ppm 1000 ppm
67-63-0	Isopropyl alcohol	Great Britain: WEL-STEL Great Britain: WEL-TWA Ireland: 15 minutes Ireland: 8 hours	1250 mg/m³; 500 ppm 999 mg/m³; 400 ppm 400 ppm 200 ppm

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.
Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection: Protective gloves according to EN 374.
Glove material: Butyl caoutchouc (butyl rubber)-Layer thickness: 0.5 mm
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Use only non-sparking tools. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Do not breathe vapour/aerosol. Do not get in eyes, on skin, or on clothing.
Take off immediately all contaminated clothing and wash it before reuse. When handling large quantities, supply emergency spray.
When using do not eat, drink or smoke. Wash hands before breaks and after work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Colour: colourless

Odour: characteristic

Odour threshold: No data available

pH value: No data available

Melting point/freezing point: not determined

Initial boiling point and boiling range: No data available

Flash point/flash point range: 27 °C (DIN 51758)

Evaporation rate: No data available

Flammability: Flammable liquid and vapour.

Explosion limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Density:	not determined
Water solubility:	soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	not self-igniting
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	Vapours can form explosive mixtures with air.
Oxidizing characteristics:	No data available

9.2 Other information

Water content:	approx. 60.5

SECTION 10: Stability and reactivity

10.1 Reactivity

Flammable liquid and vapour.
Vapours can form explosive mixtures with air.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Heating will lead to pressure increase: Danger of bursting and explosion.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.
Do not expose to temperatures above 50 °C. Protect from direct sunlight.

10.5 Incompatible materials

Alkali metals, strong oxidizing agents, strong acids, peroxides, hydrogen peroxide.

10.6 Hazardous decomposition products

Nitrogen oxides (NOx), Pyrolysis products, carbon monoxide and carbon dioxide.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects:

Acute toxicity (oral): Lack of data.
Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Lack of data.
Skin corrosion/irritation: Lack of data.
Serious eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Lack of data.
Specific target organ toxicity (repeated exposure): Lack of data.
Aspiration hazard: Lack of data.

Symptoms

The product can cause irritation of the eyes.
Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

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: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 16 10 01* = Aqueous liquid wastes containing hazardous substances
* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging

Waste key number: 20 03 01 = Mixed municipal waste

Recommendation: Dispose of waste according to applicable legislation.
Handle empty containers with care. Incineration may cause explosion.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:
UN 1993

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:
UN 1993, FLAMMABLE LIQUID, N.O.S. (Ethanol)

14.3 Transport hazard class(es)

ADR/RID: Class 3, Code: F1
IMDG: Class 3, Subrisk -
IATA-DGR: Class 3

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:
III

14.5 Environmental hazards

Marine pollutant: no

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board:	ADR/RID: Kemmler-number 30, UN number UN 1993
Hazard label:	3
Special provisions:	274 601
Limited quantities:	5 L
EQ:	E1
Contaminated packaging - Instructions:	P001 IBC03 LP01 R001
Special provisions for packing together:	MP19
Portable tanks - Instructions:	T4
Portable tanks - Special provisions:	TP1 TP29
Tank coding:	LGBF
Tunnel restriction code:	D/E

Sea transport (IMDG)

EmS:	F-E, S-E
Special provisions:	223, 274, 955
Limited quantities:	5 L
Excepted quantities:	E1
Contaminated packaging - Instructions:	P001, LP01
Contaminated packaging - Provisions:	-
IBC - Instructions:	IBC03
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T4
Tank instructions - Provisions:	TP1, TP29
Stowage and handling:	Category A.
Properties and observations:	-
Segregation group:	none

Air transport (IATA)

Hazard label:	Flamm. liquid
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L
Passenger and Cargo Aircraft:	Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L
Cargo Aircraft only:	Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L
Special provisions:	A3
Emergency Response Guide-Code (ERG):	3L

14.7 Transport in bulk according to Annex II of Marpol 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 - Great Britain

Hazchem-Code: •3Y

No data available

National regulations - EC member states

Volatile organic compounds (VOC):

34.1 % by weight

Labelling of packaging with <= 125mL content

Signal word: **Warning**

Hazard statements: not applicable

Precautionary Statements:

P102 Keep out of reach of children.

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3,40
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: P5c

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H225 = Highly flammable liquid and vapour.
H226 = Flammable liquid and vapour.
H319 = Causes serious eye irritation.
H336 = May cause drowsiness or dizziness.

Abbreviations and acronyms:

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
OEL: Occupational Exposure Limit Value
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EU: European Union
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

Reason of change: General revision
Date of first version: 29/7/2016

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.