

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 103.01 (replaces version 103.00)

Revision: 18.11.2022

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

- 1.1 Product identifier

- Trade name **NFLY Spray**

- 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** Release agent

- 1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:**

Riepe GmbH & Co. KG
Theodor Rosenbaum Str. 28-30
32257 Bünde - Deutschland
Tel.: +49 (0) 5223 - 687407-0
Fax: +49 (0) 5223 - 687407-50
E-Mail: info@riepe.eu

- **Informing department:**

Tel.: +49 (0) 5223 - 687407-0
E-mail: info@riepe.eu

- 1.4 Emergency telephone number:

Poison Control Center, Mainz
Tel. 00 49 / 61 31 / 19 240

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.

Eye Irrit. 2 H319 Causes serious eye irritation.

- 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 GHS07

- **Signal word** Danger

- **Hazard statements**

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

H319 Causes serious eye irritation.

- **Precautionary statements**

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.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

- **Additional information:**

49.005001 % by mass of the contents are flammable

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

- Determination of endocrine-disrupting properties

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List II

* SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:**
Mixture of the substances listed below with harmless additions
Active substance with propellant.

- Dangerous components:

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 Reg.nr.: 01-2119457610-43	ethanol Flam. Liq. 2, H225; Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	50-100%
CAS: 7727-37-9 EINECS: 231-783-9	nitrogen Press. Gas (Comp.), H280	≤1%
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 Reg.nr.: 01-2119457290-43	2-Butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	≤1%

- **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 advice:** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact**
In general the product does not cause skin irritation.
Wash with soap and water.
- **After eye contact**
Rinse immediately opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **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, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information** Danger of bursting of the aerosol cans at temperatures above 50 ° C.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment and keep unprotected persons away.
Keep away from ignition sources
- **6.2 Environmental precautions:**
Do not allow to enter drainage system, surface or ground water.
If large amounts are released, the authorities must be informed.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
- **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 information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace. Avoid repeated or long-term skin contact.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Beware: Container 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.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage** Store in cool, dry conditions in well sealed containers.
- **Requirements to be met by storerooms and containers:**
Observe official regulations on storage and handling of water hazardous substances
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters

- Components with critical values that require monitoring at the workplace:

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IOELV (EU)	Short-term value: 900 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm
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- DNELs

64-17-5 ethanol

Oral	DNEL (population)	87 mg/kg bw/day (Long-term, systemic effects)
Dermal	DNEL (worker)	8,238 mg/kg bw/day (Long-term, systemic effects)

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Inhalative	DNEL (worker)	380 mg/m ³ (Long-term, systemic effects)
	DNEL (population)	114 mg/m ³ (Long-term, systemic effects)
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Oral	DNEL (population)	31 mg/kg bw/day (Long-term, systemic effects)
Dermal	DNEL (worker)	1,161 mg/kg bw/day (Long-term, systemic effects)
	DNEL (population)	412 mg/kg bw/day (Long-term, systemic effects)
Inhalative	DNEL (worker)	600 mg/m ³ (Long-term, systemic effects)
	DNEL (population)	106 mg/m ³ (Long-term, systemic effects)
- PNECs		
64-17-5 ethanol		
PNEC water	2.75 mg/l (intermittent releases)	
	0.96 mg/l (freshwater)	
	0.79 mg/l (marine water)	
PNEC sediment	3.6 mg/kg dw (freshwater)	
	2.9 mg/kg dw (marine water)	
PNEC soil	0.63 mg/kg dw (soil)	
PNEC STP	580 mg/l (sewage plant)	
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PNEC water	55.8 mg/l (freshwater)	
	55.8 mg/l (marine water)	
PNEC sediment	284.74 mg/kg dw (freshwater)	
	284.7 mg/kg dw (marine water)	
PNEC soil	22.5 mg/kg dw (soil)	
PNEC STP	709 mg/l (sewage plant)	

- **Additional information:** The lists that were valid during the compilation were used as basis.

- 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.

- **Individual protection measures, such as personal protective equipment**

- **General protective and hygienic measures**

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Gases, fumes and aerosols should not be inhaled.

- **Breathing equipment:** Not necessary if room is well-ventilated.

- **Hand protection** Protective gloves and protective skin cream.

- **Material of gloves**

Butyl rubber, BR

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.

- **Penetration time of glove material**

Material of gloves is recommended for a short-term single use to protect from splashes. For permanent usage contact manufacturer of gloves.

- **Eye/face protection** Tightly sealed safety glasses.

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SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Colour:	Green
- Smell:	Alcohol-like
- Odour threshold:	Not determined.
- Melting point/freezing point:	Not determined
- Boiling point or initial boiling point and boiling range	82 °C
- Flammability	Not applicable.
- Lower and upper explosion limit	
- Lower:	3.5 Vol % (ethanol)
- Upper:	15 Vol % (ethanol)
- Flash point:	13 °C
- Ignition temperature:	Not determined.
- Decomposition temperature:	Not determined.
- pH	not applicable Not determined.
- pH-value:	
- Viscosity:	
- Kinematic viscosity	Not determined.
- dynamic:	Not determined.
- Solubility	
- Water:	miscible
- Partition coefficient n-octanol/water (log value)	Not determined.
- Vapour pressure:	Not determined.
- Density and/or relative density	
- Density at 20 °C	0.916 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.

- 9.2 Other information

- Appearance:	No further relevant information available.
- Form:	Aerosol
- Important information on protection of health and environment, and on safety.	
- Self-inflammability:	Product is not selfigniting.
- Explosive properties:	Not determined.
- Evaporation rate	Not applicable.

- Information with regard to physical hazard classes

- Explosives	Void
- Flammable gases	Void
- Aerosols	Extremely flammable aerosol. Pressurised container: May burst if heated.
- Oxidising gases	Void
- Gases under pressure	Void
- Flammable liquids	Void
- Flammable solids	Void
- Self-reactive substances and mixtures	Void
- Pyrophoric liquids	Void

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- Pyrophoric solids	Void
- Self-heating substances and mixtures	Void
- Substances and mixtures, which emit flammable gases in contact with water	Void
- Oxidising liquids	Void
- Oxidising solids	Void
- Organic peroxides	Void
- Corrosive to metals	Void
- Desensitised explosives	Void

* SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** strong oxidizing agents
- **10.6 Hazardous decomposition products:**
Formation of carbon monoxide and carbon dioxide in case of fire.

* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

64-17-5 ethanol

Oral	LD50	10,470 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC 50 / 4 h	>50 mg/l (rat) (OECD 403) >20 mg/l (mouse)

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Oral	LD50	3,300 mg/kg (rat)
Dermal	LD50	5,000 mg/kg (rbt)
Inhalative	LC 50 / 4 h	34.5 mg/l (rat) 40 mg/l (mus)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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.

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- STOT-repeated exposure:**64-17-5 ethanol**

Oral NOAEL 1,760 mg/kg (rat) (OECD 408, 90 d, target organ: liver)

- 11.2 Information on other hazards**- Endocrine disrupting properties**

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List II

SECTION 12: Ecological information

- 12.1 Toxicity**- Aquatic toxicity:****64-17-5 ethanol**LC 50 / 48 h 8,140 mg/l (*Leuciscus idus*)EC 50 / 48 h >10,000 mg/l (*Daphnia magna*)EC 50 / 72 h 275 mg/l (*Chlorella vulgaris*) (OECD 201)**78-93-3 2-Butanone**

LC 50 / 96 h >3,000 mg/l (fish)

EC 50 / 48 h 1,382 mg/l (*Daphnia*)**- 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.**- 12.5 Results of PBT and vPvB assessment****- PBT:** Not applicable.**- vPvB:** Not applicable.**- 12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.**- 12.7 Other adverse effects** No further relevant information available.**- Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):****64-17-5 ethanol**EC 50 (static) >100 mg/l (*Chlorella pyrenoidosa*) (OECD 201)**- Additional ecological information:****- General notes:**

Do not allow to enter drainage system, surface or ground water

Water hazard class 1 (Self-assessment): slightly hazardous for water.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Waste disposal key number:

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

- Uncleaned packagings: Disposal must be made according to official regulations.

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- Recommendation:

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
Containers may be completely emptied and cleaned and send to be reconditioned or recycled.

SECTION 14: Transport information

- 14.1 UN number or ID number - ADR/RID, IMDG, IATA	UN1950
- 14.2 UN proper shipping name - ADR/RID - IMDG - IATA	1950 AEROSOLS AEROSOLS AEROSOLS, flammable
- 14.3 Transport hazard class(es) - ADR/RID - Class - Label	2 5F Gases. 2.1
- IMDG, IATA - Class - Label	2.1 Gases. 2.1
- 14.4 Packing group - ADR/RID, IMDG, IATA	Void
- 14.5 Environmental hazards: - Marine pollutant:	Not applicable. No
- 14.6 Special precautions for user - Kemler Number: - EMS Number: - Stowage Code - Segregation Code	Warning: Gases. - F-D,S-U 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. 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.
- 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
- Transport/Additional information: - ADR/RID - Limited quantities (LQ)	1L

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- Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
- IMDG	
- Limited quantities (LQ)	1L
- Excepted quantities (EQ)	Código E4 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**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
- **Precautionary statements**
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.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** P3b FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **REGULATION (EU) 2019/1148**

- **Regulation (EC) No 273/2004 on drug precursors**

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- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

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- National regulations**- Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

- VOC:

51 volatile organic compounds (Swiss Ordinance on the Incentive Tax on Volatile Organic Compounds).

- Other regulations, limitations and prohibitive regulations**- Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is listed.

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

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- UFI market placements:**- Relevant phrases**

Complete wording of hazard statements and risk phrases (H- and R-phrases) mentioned in section 3. These phrases refer to the constituents. The labelling for this product is stated in section 2.

- Department issuing data specification sheet: see item 1: Informing department**- Date of previous version: 18.11.2022****- Version number of previous version: 103.00****- 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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

NOAEL: No Observed Adverse Effect Level

RPE: Respiratory Protective Equipment

RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)

ADR: Accord relatif au transport international 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 Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

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)

ISO: International Organisation for Standardisation

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Aerosol 1: Aerosols – Category 1

Press. Gas (Comp.): Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- * Data compared to the previous version altered.