

**N. F.– NON FLAMMABLE CONTACT CLEANER**

Creation date	06th April 2023	Version	4.0
Revision date			

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

- 1.1. Product identifier** N. F.– NON FLAMMABLE CONTACT CLEANER  
Substance / mixture mixture  
Number R 91019  
UFI XWS9-2MRM-V20P-SP34
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Mixture's intended use**  
Cleaning agent.  
**Mixture uses advised against**  
For professional use only.
- 1.3. Details of the supplier of the safety data sheet**  
**Supplier**  
Name or trade name RETECH, s.r.o.  
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00  
Czech Republic  
Identification number (CRN) 25018205  
VAT Reg No CZ25018205  
Phone +420327596428  
E-mail info@retech.cz  
Web address www.retech.com
- Competent person responsible for the safety data sheet**  
Name RETECH, s.r.o.  
E-mail info@retech.cz
- 1.4. Emergency telephone number**  
European emergency number: 112

**SECTION 2: Hazards identification**

- 2.1. Classification of the substance or mixture**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is classified as dangerous.

Aerosol 3, H229  
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse physico-chemical effects**

Pressurised container: May burst if heated.

**Most serious adverse effects on human health and the environment**

Harmful to aquatic life with long lasting effects.

- 2.2. Label elements**

**Signal word**

Warning

**Hazard statements**

H229

Pressurised container: May burst if heated.

H412

Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.

P251

Do not pierce or burn, even after use.

P261

Avoid breathing spray.

P271

Use only outdoors or in a well-ventilated area.

P410+P412

Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P501

Dispose of contents/container to by disposing in a hazardous waste receptacle.

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### 2.3. Other hazards

High fume concentrations can lead to headaches, vertigo, sleepiness, nausea, and loss of consciousness. Can cause heart arrhythmia. The contents are pressurized with Nitrogen (N<sub>2</sub>). The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 102687-65-0 EC: 700-486-0 Registration number: 01-2119855084-38	(1E)-1-chloro-3,3,3-trifluoroprop-1-ene	40-<100	Press. Gas (liquefied gas), H280 Aquatic Chronic 3, H412	

Full text of all classifications and hazard statements is given in the section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards. In the event of unconsciousness, do not provide food by mouth. Take off contaminated clothing.

#### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. If the victim is not breathing, perform artificial respiration. If aspiration into the lungs is suspected, e.g. when vomiting, admit to hospital immediately. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

#### If on skin

Remove contaminated clothes. Wash with plenty of soap and water.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 15 minutes.

#### If swallowed

Unlikely. Ensure calm environment for body and mind. Rinse the mouth with clean water only if the person is conscious. DO NOT INDUCE VOMITING! If the affected person vomits, make sure to prevent inhalation of the vomit. Do not provide anything to eat or drink. Provide medical treatment. Bring an original container with the label and the Safety Data Sheet of the given substance as appropriate.

### 4.2. Most important symptoms and effects, both acute and delayed

#### If inhaled

Not expected.

#### If on skin

Not expected.

#### If in eyes

When intruding eyes, it can evoke irritation.

#### If swallowed

Not expected.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

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**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

The mixture is non-flammable. Accommodate extinguishing components to the location of fire. Foam, carbon dioxide, powder, water mist.

**Unsuitable extinguishing media**

Water - full jet.

**5.2. Special hazards arising from the substance or mixture**

A fire can cause dangerous chemical reactions due to the presence of F and Cl compounds. The heat from the fire increases the internal pressure in the containers and can cause them to burst or explode. Closed containers with the product near the fire should be cooled with water.

**5.3. Advice for firefighters**

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Dispose of contaminated extinguishing water and remains after the fire in accordance with the official regulations.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Pressurised container: May burst if heated. Remove all ignition sources; provide sufficient ventilation. Ensure good interior ventilation, especially at floor level (Fumes are heavier than air). Do not inhale vapours. Prevent vapors from entering drains. Use personal protective equipment for work. Do not eat, drink and smoke during work. Keep unprotected persons away. Follow the instructions in the Sections 7 and 8.

**6.2. Environmental precautions**

Prevent contamination of the soil and entering surface or ground water. Prevent seepage into sewage system, workpits and cellars. Explosion risk. Risk of formation of explosive vapours above water surface.

**6.3. Methods and material for containment and cleaning up**

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Use only outdoors or in a well-ventilated area. Do not inhale vapours. Do not inhale aerosols. Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Keep away from heat, open flames. Do not pierce or burn, even after use. Use explosion-proof electrical equipment. Take action to prevent static discharges. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as per Section 8. Do not eat, drink or smoke when using this product. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Regular cleaning of equipment, work area and clothing is recommended. Observe valid legal regulations on safety and health protection. Store in a dry place. Keep cool.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Keep only in original packaging. Use explosion-proof electrical equipment.

**The specific requirements or rules relating to the substance/mixture**

Protect against strong acids and oxidizing agents.

**7.3. Specific end use(s)**

For professional use only.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

The mixture contains no substances for which occupational exposure limits are set.

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**DNEL**

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	1779 mg/m <sup>3</sup>	Chronic effects systemic		
Consumers	Inhalation	379 mg/m <sup>3</sup>	Chronic effects systemic		
Consumers	Oral	109 mg/kg bw/day	Chronic effects systemic		

**PNEC**

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Route of exposure	Value	Value determination	Source
Freshwater environment	0.038 mg/l		
Marine water	0.0038 mg/l		
Freshwater sediment	0.691 mg/kg bw/day		
Sea sediments	0.0691 mg/kg bw/day		
Sea sediments	0.126 mg/kg of dry substance of soil		

**8.2. Exposure controls**

Follow the usual measures intended for health protection at work and especially for good ventilation. Ensure that persons handling with the product wear protective equipment. Take off contaminated clothing and wash before reuse. Do not store together with food, drink and animal feed. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

**Eye/face protection**

Protective goggles or face shield (based on the nature of the work performed).

**Skin protection**

Hand protection: Protective gloves resistant to the product. Material of gloves: Viton. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Wash contaminated reusable gloves with water before removing and store in a well-ventilated place. Other protection: protective workwear and footwear. Take off contaminated clothing and wash before reuse.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Filter AX. Filter A/P2. The protection provided by masks is in any case limited.

**Thermal hazard**

Not available.

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

**SECTION 9: Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state	gas
Colour	colourless
Odour	characteristic
Melting point/freezing point	<-90 °C
Boiling point or initial boiling point and boiling range	19 °C (OECD 103)
Flammability	non-flammable
Lower and upper explosion limit	data not available
Flash point	not applicable
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	gas
Kinematic viscosity	data not available

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Solubility in water	insoluble
Solubility in water	1,9 g/l (20 °C)
Partition coefficient n-octanol/water (log value)	2,2 (25 °C)
Vapour pressure	1516 hPa at 30 °C
Vapour pressure	1065 hPa at 20 °C
Density and/or relative density	data not available
Relative vapour density	data not available
Particle characteristics	data not available
Form	aerosol dispenser: spray aerosol

**9.2. Other information**

Evaporation rate	data not available
Ignition temperature	380 °C (986,8-1035,9 hPa; DIN 51794)

**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

The product is stable and no degradation occurs under normal use.

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

May polymerise.

**10.4. Conditions to avoid**

Pressurised container: May burst if heated. Protect against flames, sparks, overheating. May react explosively at elevated pressure and/or temperature. Protect from sunlight.

**10.5. Incompatible materials**

Protect against strong oxidizing agents. Magnesium. Aluminium.

**10.6. Hazardous decomposition products**

Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire. -COX, HCl, HF.

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

No toxicological data is available for the mixture.

**Acute toxicity**

Based on available data the classification criteria are not met.

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation	LC <sub>50</sub>	120000 ppm	4 hours	Rat	

**Skin corrosion/irritation**

Based on available data the classification criteria are not met.

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Route of exposure	Result	Method	Exposure time	Species
Oral	Not irritating	OECD 404	4 hours	Rabbit

**Serious eye damage/irritation**

Based on available data the classification criteria are not met.

**Respiratory or skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**
**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

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**Toxicity for specific target organ - single exposure**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - repeated exposure**

Based on available data the classification criteria are not met.

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Route of exposure	Parameter	Value	Exposure time	Specific target organ	Result	Species	Sex
Inhalation	LOAEL	4000 ppm	90 days	Nasal mucosa		Rat	

**Aspiration hazard**

Based on available data the classification criteria are not met.

**11.2. Information on other hazards**

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

**SECTION 12: Ecological information**

**12.1. Toxicity**

**Acute toxicity**

Harmful to aquatic life with long lasting effects.

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Parameter	Method	Value	Exposure time	Species	Environment	Value determination
LC <sub>50</sub>	OECD 203	38 mg/l	96 hours	Fish (Oncorhynchus mykiss)		
EC <sub>50</sub>	OECD 201	106.7 mg/l	72 hours	Algae (Pseudokirchneria lla subcapitata)		Indicator of growth
NOEC	OECD 201	115 mg/l	72 hours	Algae (Pseudokirchneria lla subcapitata)		Indicator of growth

**12.2. Persistence and degradability**

**Biodegradability**

(1E)-1-chloro-3,3,3-trifluoroprop-1-ene

Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301D	0 %	28 days		Hardly biodegradable

not available

**12.3. Bioaccumulative potential**

Not available.

**12.4. Mobility in soil**

Not available.

**12.5. Results of PBT and vPvB assessment**

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

**12.6. Endocrine disrupting properties**

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

**12.7. Other adverse effects**

Not available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Pressurised container: May burst if heated. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.

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### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended.  
Decision 2000/532/EC establishing a list of wastes, as amended.

### Waste type code

16 03 05 organic wastes containing hazardous substances \*

### Packaging waste type code

15 01 11 metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers \*

(\*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

## SECTION 14: Transport information

### 14.1. UN number or ID number

UN 1950

### 14.2. UN proper shipping name

AEROSOLS

### 14.3. Transport hazard class(es)

2 Gases

### 14.4. Packing group

not relevant

### 14.5. Environmental hazards

not relevant

### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

### 14.7. Maritime transport in bulk according to IMO instruments

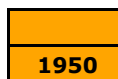
not relevant

### Additional information

Hazard identification No.

UN number

Safety signs



2.2



### Road transport - ADR

Limited quantities

1 L

Excepted quantities

E0

Tunnel restriction code

(E)

### Railway transport - RID

Excepted quantities

E0

### Air transport - ICAO/IATA

Packaging instructions passenger

203

Cargo packaging instructions

203

### Marine transport - IMDG

EmS (emergency plan)

F-D, S-U

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**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

**15.2. Chemical safety assessment**

not available

**SECTION 16: Other information****A list of standard risk phrases used in the safety data sheet**

H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H412	Harmful to aquatic life with long lasting effects.

**Guidelines for safe handling used in the safety data sheet**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing spray.
P271	Use only outdoors or in a well-ventilated area.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501	Dispose of contents/container to by disposing in a hazardous waste receptacle.

**Other important information about human health protection**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

**Key to abbreviations and acronyms used in the safety data sheet**

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log K <sub>ow</sub>	Octanol-water partition coefficient
NOEC	No observed effect concentration



**SAFETY DATA SHEET**

according to Regulation (EC) No 1907/2006 (REACH) as amended

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OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Aerosol	Aerosol
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Press. Gas	Gases under pressure

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

not available

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**The changes (which information has been added, deleted or modified)**

The version 4.0 replaces the SDS version from 21 December 2022. Changes were made in sections 1, 2, 3, 8, 9, 11, 12, 13, 15 and 16.

**More information**

Classification procedure - calculation method.

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.